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Record No. _____

IN THE SUPREME COURT OF THE UNITED STATES
October Term, 1997

ROANOKE RIVER BASIN ASSOCIATION,

Petitioner,

v.

FEDERAL ENERGY REGULATORY COMMISSION,

Respondent.

On Petition For Writ of Certiorari
To The United States Court of Appeals
For The District of Columbia Circuit

PETITION FOR WRIT OF CERTIORARI

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QUESTIONS PRESENTED

Whether the altered discharge from a hydropower project resulting from federal licensing action authorizing a non-project use of water from the project reservoir is "any discharge" within the meaning of § 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1)?

LIST OF PARTIES AND AMICI

PETITIONERS:

Roanoke River Basin Association
State of North Carolina

RESPONDENT:

Federal Energy Regulatory Commission

INTERVENOR:

City of Virginia Beach, Virginia

AMICI:

The United States

Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Mexico, New York, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Texas, Utah, Vermont, Washington, West Virginia, and Wyoming (in support of Petitioner North Carolina)

Virginia (in support of Respondent)

American Public Power Association
Edison Electric Institute
National Hydropower Association

TABLE OF CONTENTS

QUESTIONS PRESENTED ii

LIST OF PARTIES AND AMICI iii

TABLE OF AUTHORITIES vii

PETITION FOR WRIT OF CERTIORARI 1

PRIOR OPINIONS 2

JURISDICTION 2

STATUTES AND REGULATIONS INVOLVED 3

STATEMENT OF THE CASE 4

Proceedings Below 4

The Roanoke River System 6

The License Amendment 7

Water Quality and Designated Uses in the Lower Roanoke River 8

REASONS FOR GRANTING THE WRIT 11

CERTIORARI SHOULD BE GRANTED TO DECIDE WHETHER AN ALTERED WATER RELEASE IS "ANY DISCHARGE" WITHIN

THE MEANING OF SECTION 401(A)(1) OF THE CLEAN WATER ACT 11

I. The Decision Below Conflicts with a Decision of the Court of Appeals for the Fourth Circuit 11

II. Certiorari Should Be Granted Because This Case Presents an Important, Unsettled Question of the Balance Struck by Congress between the National and State Governments in the Protection of Water Quality. 11

CONCLUSION 19

Appendix A Opinions Below (May 9, 1997) 1a

Appendix B Judgment Below (May 9, 1997) 52a

Appendix C Order Denying Petitions for Rehearing (Aug. 21, 1997) 54a

Appendix D Order Denying Suggestion for Rehearing *In Banc* (Aug. 21, 1997) 55a

Appendix E Remand of Record (Sept. 19, 1996) 57a

Appendix F Order Amending Order Remanding Record To FERC (Sept. 19, 1996) 61a

Appendix G FERC Order Approving Non-Project Use of Project Lands and Waters and Amending License (July 26, 1995) and Errata (Aug. 23, 1995) 63a

Appendix H FERC Order Denying Rehearing and Denying Stay (Sept. 22, 1995) 102a

Appendix I FERC Order on Remand (Nov. 7, 1996) 125a

Appendix J Text of § 401, 33 U.S.C. § 1341 . . . . . 152a

Appendix K Text of § 303, 33 U.S.C. § 1313 . . . . . 158a

Appendix L Text of relevant definitions in § 502, 33 U.S.C. § 1362 . . . . . 169a

Appendix M "Terms and Conditions of License for Unconstructed Major Project Affecting Navigable Waters of the United States," 16 FPC 1284-88 . . . . . 170a

TABLE OF AUTHORITIES

Cases

American Mining Congress v. EPA, 824 F.2d 1177 (D.C. Cir. 1987) 16

Burnet v. Chicago Portrait Co., 285 U.S. 1 (1932) 16

City of Fredericksburg v. FERC, 876 F.2d 1109 (1989)8, 11 . . . . . .

Keating v. FERC, 927 F.2d 616 (D.C. Cir. 1991) 19

National Wildlife Federation v. Gorsuch, 693 F.2d 156 (D.C. Cir. 1982) 13

P.U.D. No. 1 of Jefferson County v. Washington Department of Ecology, 511 U.S. 700 (1994) . . . 12

Power Authority of the State of New York v. Williams, 101 A.D.2d 659, 660, 475 N.Y.S.2d 901 (D3 1984) 16

Save Our Community v. U.S.E.P.A., 971 F.2d 1155 (5th Cir. 1992) 17

Tulalip Tribes of Washington v. FERC, 732 F.2d 1451 (9th Cir. 1984) 13

United Savings Ass'n of Texas v. Timbers of Inwood Associates, Ltd., 484 U.S. 365 (1988) 16

United States v. Puerto Rico, 721 F.2d 832 (1st Cir. 1983) 19

Statutes

16 U.S.C. § 825*l*, Federal Power Act, § 313. 5

28 U.S.C. § 1254 3

33 U.S.C. § 1251, Clean Water Act, § 101 . . . . . 14, 19

33 U.S.C. § 1313, CWA § 303 . . . . . 3, 19

33 U.S.C. § 1314, CWA § 304. 12

33 U.S.C. § 1341, CWA § 401 . . . . . *passim*

33 U.S.C. § 1342, CWA § 402 12

33 U.S.C. § 1344, CWA § 404 . . . . . 13, 18

33 U.S.C. § 1362(16), CWA § 502(16) 12, 15, 16

33 U.S.C. § 1362(19), CWA § 502(19) 12, 15

Regulatory Materials

18 C.F.R. § 4.38(f)(7) (1995) 5

In The

Supreme Court of the United States

October Term, 1997

ROANOKE RIVER BASIN ASSOCIATION
Petitioner,

v.

FEDERAL ENERGY REGULATORY COMMISSION,
Respondent.

PETITION FOR WRIT OF CERTIORARI

The Roanoke River Basin Association (RRBA) petitions the Court for a writ of certiorari to review the judgment of the United States Court of Appeals for the District of Columbia Circuit in this case. That decision denied RRBA's petition for review of an order of the Federal Energy Regulatory Commission (FERC) issued without either a certification or a waiver from the State of North Carolina pursuant to § 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1). The FERC order approved a license amendment that authorizes the licensee to sell and convey 60 million gallons of water a day from its hydropower project reservoir to a municipality for use in another river basin, thereby altering the existing releases from the dam.

PRIOR OPINIONS

This case (No. 95-1500 below) was consolidated below with the State of North Carolina's petition for review (No. 95-1494 below). The United States Court of Appeals for the District of Columbia published majority and dissenting opinions in these consolidated cases under the style *North Carolina v. Federal Energy Regulatory Commission*, 112 F.3d 1175, on May 9, 1997. The text of those opinions is reprinted at Appendix A to this petition, and the judgment on the same date is reprinted at Appendix B. The petitions for rehearing filed by RRBA and North Carolina were denied on August 21, 1997 (order reprinted at Appendix C). Their suggestions for rehearing *in banc* were also denied on that date (order reprinted at Appendix D). The court had previously remanded the matter to the Federal Energy Regulatory Commission in an unpublished September 11, 1996, order (reprinted at Appendix E) and a subsequent September 19, 1996, order modifying the initial remand order (reprinted at Appendix F). FERC's decision to grant the license amendment is published, *Virginia Electric and Power Co.*, Project No. 2009-003, 72 FERC ¶ 61,075 (July 26, 1995) (reprinted at Appendix G), as is its decision rejecting the joint request for rehearing filed by North Carolina and the Roanoke River Basin Association, 72 FERC ¶ 61,283 (September 22, 1995) (reprinted at Appendix H), and its Order on Remand, 77 FERC ¶ 61,138 (November 7, 1996) (reprinted at Appendix I).

JURISDICTION

The judgment of the Court of Appeals was entered on May 9, 1997. The Association's Petition for Rehearing and Suggestion for In Banc Consideration were denied on August 21, 1997, which is within the 90-day period for filing this

petition pursuant to this Court's Rule 13.3. The Court's jurisdiction is invoked pursuant to 28 U.S.C. § 1254.

STATUTES AND REGULATIONS INVOLVED

The relevant portion of § 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1), provides:

> Any applicant for a Federal license or permit to conduct any activity . . . which may result in any discharge into the navigable waters, shall provide the . . . permitting agency a certification from the State in which the discharge originates . . . or will originate . . . .

The entirety of § 401 and § 303, 33 U.S.C. § 1313, are reprinted at Appendices J and K respectively.

Section 101(b), 33 U.S.C. § 1251(b), provides:

> It is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this chapter. It is the policy of Congress that the States manage the construction grant program under this chapter and implement the permit programs under sections 1342 and 1344 of this title. It is further the policy of Congress to support and aid research relating to the

> prevention, reduction, and elimination of pollution and to provide Federal technical services and financial aid to State and interstate agencies and municipalities in connection with the prevention, reduction, and elimination of pollution.

Relevant Clean Water Act definitions, § 502(12) ("discharge of a pollutant"), § 502(16) ("discharge") and § 502(19) ("pollution"), 33 U.S.C. §§ 1362(12), 1362(16), 1362(19), are reprinted in Appendix L.

STATEMENT OF THE CASE

Proceedings Below

The only question here is one of statutory construction: Does the Clean Water Act's meaning of "any discharge" include an altered discharge? The question arises in the context of the license amendment obtained by Virginia Electric and Power Company (VEPCO) from the Federal Energy Regulatory Commission (FERC) on July 26, 1995, for "a substantial new use of project waters" for a non-project use at its Roanoke Rapids and Gaston Hydropower Project (Project).[1] The newly

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[1] D.A. 2402 n.1. "On July 26, 1995, the Commission issued its order approving the non-project use of project lands and waters and amending license." *VEPCO*, 72 FERC at 62,215. VEPCO's application requested: "The non-project use of project land and waters . . . ." D.A. 10, ¶ 17. The Commission ruled on August 11, 1994, that VEPCO's application "entailed a substantial new use of project waters . . . [which] requires amendment of the license." D.A. 2402 n.1. On remand, FERC ignored the substantial new use of project waters for non-project purposes and identified the construction and operation of the Virginia Beach water supply project as the sole activity authori zed by the license amendment. 77

authorized use is VEPCO's sale of 60 million gallons of water a day (mgd) to the City of Virginia Beach, Virginia (Virginia Beach). The water will be withdrawn by Virginia Beach from the Project reservoir on the Roanoke River, transported to another river basin through a 76-mile pipeline constructed by Virginia Beach, and used for municipal water supply purposes. The waste water will then be discharged to the Atlantic Ocean. Petitioner, the Roanoke River Basin Association (RRBA), is a 50-year-old, nonprofit, membership organization of local governments, business organizations and individuals in Virginia and North Carolina, having no parent or affiliated corporation. RRBA invoked the jurisdiction of the court of appeals pursuant to 16 U.S.C. § 825*l*, as did the State of North Carolina, to challenge FERC's approval of the license amendment. Both RRBA and North Carolina contend that FERC's licensing action, taken without a certification or waiver from North Carolina, violated § 401(a)(1) and is therefore invalid.

FERC's initial position was that its regulation, 18 C.F.R. § 4.38(f)(7)(iii), exempted license amendments from the § 401(a)(1) requirement unless "the amendment would have a material adverse impact on the water quality in the discharge from the project. . . ." FERC assumed *arguendo* that the altered dam release in this case was "any discharge" within the meaning

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FERC at 61,518. This post hoc rationalization was an obvious attempt to buttress FERC's new position on remand that the activity authorized by the license amendment was "separate from" the operation of the Project. *Id.* The court below accepted the post hoc rationalization (App. A at 17a, 112 F.3d at 1187) notwithstanding the clear language to the contrary in the VEPCO application and FERC's own previous orders. In particular, FERC had determined earlier that it had no authority over Virginia Beach's construction and operation of its water supply project. 72 FERC at 62,221. By definition, a license amendment must authorize activity of the licensee itself, not a stranger to the license.

of § 401(a)(1). But a panel of the District of Columbia Circuit remanded the matter to FERC for a definitive resolution of that question.

On remand, FERC decided that the dam release, as altered by the license amendment, was not encompassed by the statutory term "any discharge." A majority of the District of Columbia Circuit panel voted to affirm FERC's decision, and declined to rehear the matter. A majority of the court of appeals denied rehearing *in banc*.

The Roanoke River System

The Roanoke River begins in the mountains of Virginia and flows in a southeasterly direction approximately 400 miles to Albemarle Sound in North Carolina, draining a large area of Virginia and North Carolina. D.A. 3010. FERC issued a 50-year license to VEPCO in 1951 for its Roanoke Rapids Hydropower Development 137 river miles from the mouth of the river. *Virginia Electric and Power Co.*, 10 FPC 1 (1951). It also issued a 41-year license in 1960 to VEPCO for the Gaston Hydropower Development, which is located immediately upstream. *Virginia Electric and Power Co.*, 23 FPC 537 (1960).[2] The two developments are now treated as a single project, and operate subject to a single FERC license. *Id.* at 543. Both dams in VEPCO's Project are located in North Carolina. Only a portion of the Project's upstream reservoir, Lake Gaston, lies in Virginia. D.A. 3211.

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[2] In its 1960 licensing action, FERC incorporated "Terms and Conditions of License for Unconstructed Major Project Affecti ng Navigable Waters of the United States," originally set forth at 16 FPC 1284-88. *VEPCO*, 23 FPC 544, ¶ D. The text of relevant articles of that document are reproduced in Appendix M.

The License Amendment

The challenged FERC license amendment authorizes VEPCO to convey property interests to the City of Virginia Beach so that the City may divert 60 mgd from the Lake Gaston reservoir for municipal use in southeastern Virginia, and place an intake structure for that purpose within the Project. D.A. 2402 and n.1. The intake is located on Pea Hill Creek in the Virginia portion of the reservoir just a few hundred yards north of the North Carolina border. D.A. 3219. During droughts, there is no natural inflow into Pea Hill Creek. As a result, all of the water that will be withdrawn by Virginia Beach during a drought will be water from North Carolina backed up by VEPCO's dam across the North Carolina border and into the Virginia portion of Pea Hill Creek. D.A. 2566.

As a result of the proposed water diversion, VEPCO will operate the Project with less water available for downstream release and hydropower generation. D.A. 3364. It will compensate by modifying the operation of the gates at the dam that control the flow of water through the turbines[3] to allow less water to pass downstream, thus assuring the maintenance of reservoir levels within operating limits. D.A. 70. VEPCO will also be required at times to *increase* its dam releases under the terms of the license amendment during striped bass spawning season. 72 FERC at 61,400 (Article 46). This requirement may further curtail downstream releases at other times. This will result in different and, at most times, lower dam releases than

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[3] Water has never been allowed over the spillway at the Gaston Dam. All water released from the Gaston Development passes through its hydroelectric turbines in controlled discharges that are regulated by the opening and closing of the intake gates. D.A. 45512-16.

would occur under the 1960 license, which required that *all* project water be used for original project purposes.[4]

At 60 mgd, Virginia Beach would be the largest water consumer in the Roanoke River basin. Its diversion will far exceed the consumption by any other user, and will be one-half of the amount consumed by *all* other projected consumptive uses in the basin in 2030. D.A. 3273.

Water Quality and Designated Uses in the Lower Roanoke River

VEPCO's diminished dam releases may adversely affect water quality in the Lower Roanoke River. Dissolved oxygen levels may decline; contaminants will be concentrated in a smaller volume of water; water temperature is likely to rise; and saltwater intrusion may increase. D.A. 3236, 3316, 3322. EPA concluded that, as a result of the reduction in dam releases in this case, "there will be water quality constraints to multiple use attainability in the future." D.A. 3497. Relying on *City of Fredericksburg v. FERC*, 876 F.2d 1109 (4th Cir. 1989), North Carolina insisted on having an opportunity to review the license amendment under § 401(a)(1), contending to FERC that the adverse water quality effects of reduced dam releases could be significant. D.A. 1846-48.[5]

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[4] App. M at 170a-172a. The 1960 FERC license also stated that VEPCO's Gaston development would use the *entire* hydraulic head between the tailrace of Kerr Reservoir and VEPCO's Roanoke Rapids reservoir. *VEPCO*, 23 FPC at 541.

[5] From the first announcement of the proposed transfer of water fro m the Roanoke River to southeastern Virginia, Virginia Beach has been well aware of North Carolina's concern, and understood the consequences of going forward without agreement from North Carolina:

North Carolina pointed particularly to the probable adverse impact of the license amendment on designated uses downstream of VEPCO's Project, particularly striped bass spawning, because flows in the Lower Roanoke River are "already at critically low levels." D.A. 1199. Although its concurrence was unnecessary for § 401(a)(1) to apply here, FERC itself also concluded that the license amendment could result in an adverse impact on downstream uses. D.A. 3362-63, 3939-40. In 1988, Congress found the Albemarle Sound-Roanoke River striped bass population had dramatically declined and "may soon reach a level from which recovery will be exceptionally difficult." P.L. 100-589, § 5(a)(2), 102 Stat. 2984. Congress directed that a study be undertaken of the causes of the decline. The report of that study recommended that water flow needs for each life-cycle stage of striped bass be determined and that augmentation flows be modified accordingly.[6]

Since VEPCO constructed the Project pursuant to the 1951 and 1960 licenses, sufficient water has not been available every year to provide target striped bass augmentation flows below the Project. D.A. 3292. According to North Carolina:

> "Lake Gaston has the capacity to satisfy the long-term water demands of Virginia Beach. However, unless and until a bi-state agreement can be reached between North Carolina and Virginia on the use of shared water resources and a resolution of the interbasin transfer issue reached within the Virginia General Assembly, Lake Gaston cannot be regarded as a viable supply option for Virginia Beach." D.A. 45650.

[6] North Carolina Striped Bass Study Management Board, *Report on the Albemarle Sound-Roanoke River Stock of Striped Bass* 40 (1992) (noted at D.A. 3395).

> "Under current conditions water quantity and quality are frequently inadequate to assure conditions for survival of all striped bass life stages." D.A. 1203-04

Fishery agencies have urged adoption of a program of dam releases to simulate the natural range of flows as closely as possible for the preservation and enhancement of striped bass. D.A. 3294.

North Carolina and RRBA have objected to the diversion of large volumes of water from the Roanoke River, particularly when there is already insufficient water in the river system to assure current target flows during spawning season. D.A. 3292. Among other effects, VEPCO's sale of 60 mgd of water from its Project to Virginia Beach will: (1) reduce the amount of water available to release downstream each spring to meet enhanced flow requirements for striped bass spawning, D.A. 3297; (2) prolong periods during droughts when flows will be at their lowest levels, thus causing increased stress to aquatic life and aggravated oxygen, thermal and other water quality problems, D.A. 1201, 3283 and 4035; and (3) lower the volume of freshwater inflow into Albemarle Sound by decreasing average dam releases, thereby increasing salt water intrusion. D.A. 3283, 4035 and 4037.

REASONS FOR GRANTING THE WRIT

CERTIORARI SHOULD BE GRANTED TO DECIDE WHETHER AN ALTERED WATER RELEASE IS "ANY DISCHARGE" WITHIN THE MEANING OF SECTION 401(A)(1) OF THE CLEAN WATER ACT

I. The Decision Below Conflicts with a Decision of the Court of Appeals for the Fourth Circuit

The decision of the District of Columbia Circuit in this case is in conflict with a decision of the Fourth Circuit in *City of Fredericksburg v. FERC*, 876 F.2d 1109 (1989). In that case, an original license for the installation of an electricity-generating powerhouse at an existing dam, the operation of which would reduce downstream flows, was invalidated because it was issued without a § 401(a)(1) certification or waiver from the Commonwealth of Virginia as required by § 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1). That court held that there was a discharge and, thus, mandatory state review under § 401(a)(1). The majority of the panel below ruled, to the contrary, that there is not "any discharge" within the meaning of § 401(a)(1) unless a substance is added to a stream (App. A at 19a, 112 F.3d at 1187).

II. Certiorari Should Be Granted Because This Case Presents an Important, Unsettled Question of the Balance Struck by Congress between the National and State Governments in the Protection of Water Quality.

This Court has never squarely addressed the question of whether a dam release is a discharge within the meaning of

§ 401(a)(1). But in another § 401(a)(1) case, the Court concluded that "diminished water quantity . . . can constitute water pollution" and that "a sufficient lowering of the water quantity in a body of water could destroy all of its designated uses." *P.U.D. No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700, 719-20 (1994). The Court also noted that the Clean Water Act itself defines the alteration of stream flow as water pollution. *Id.*, *citing* 33 U.S.C. §§ 1314(f)(2)(F) and 1362(19). This includes changes in stream flow caused by dams. 511 U.S. at 720.

The definition of "any discharge" adopted by the majority of the panel of the District of Columbia Circuit is clearly in conflict with the reasoning of the Court in *P.U.D. No. 1*. This case presents the Court with the opportunity to decide whether a dam-induced alteration in flow is "any discharge" within the meaning of § 401(a)(1).[7]

Over a dissent, a panel majority in this case decided that a license amendment reducing the volume of releases at an existing dam without adding any new substance does not require a state certification or waiver under § 401(a)(1) from the state in which the dam is located. The decision below will have a sweeping impact. It will put all or most FERC licensing actions involving dam releases effectively beyond the reach of the state

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[7] The decision below can also be invoked to deny states the right under § 401(a)(1) to review permit amendments or new permits issued by EPA under the National Pollutant Discharge Elimination Sy stem established by the Clean Water Act § 402, 33 U.S.C. § 1342, that would result in a volume reduction in existing discharges.

certification requirement of § 401(a)(1), contrary to the clear intent of Congress.[8]

The reasoning of the court of appeals that a substance must be added to a waterbody for a discharge to occur (App. A at 19a, 112 F.3d at 1187) compels the conclusion that dam discharges themselves are not discharges. A dam merely modifies the flow of a stream; it does not add pollutants or any other substances to the stream. *National Wildlife Federation v. Consumers Power Co.*, 862 F.2d 580, 590 (6th Cir. 1988); *Tulalip Tribes of Washington v. FERC*, 732 F.2d 1451, 1454 (9th Cir. 1984); *National Wildlife Federation v. Gorsuch*, 693 F.2d 156, 171 (D.C. Cir. 1982). Applying the rationale of the court below, a FERC license amendment resulting in reduction of an existing discharge will not trigger § 401(a)(1), no matter how substantial the reduction.[9] Also, relicensing will not require a certification or waiver because it authorizes no

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[8] *See* 116 Cong. Rec. 8984 (Mar. 24, 1970) (Sen. Mu skie, the bill's chief sponsor); 115 Cong. Rec. 289 71 (1969) (Sen. Cooper). Shortly after the predecessor of § 401 was enacted, the Federal Power Commission (FERC's predecessor) proposed regulations requiring state certification of dam releases. 36 Fed. Reg. 15669 (1971). It remained FERC's position that dam releases are "discharges" until the filing of its opposition to the petitions for rehearing below. In fact, FERC counsel conceded below that some reductions in existing discharges resulted in "discharges" requiring § 401(a)(1) review. FERC brief, dated Dec. 24, 1996, at 11 n.9.

[9] Although states may have an independent right to certify those new hydropower projects that involve the discharge of fill material requiring a Clean Water Act § 404 permit, they will have no such opportunity where flows can be reduced without a § 404 permit, which will include virtually all relicensing, and some original licensing, proceedings. *See, e.g., City of Fredericksburg v. FERC*, 876 F.2d 1109 (4th Cir. 1989) (application for original FERC license to install an electricity-generating powerhouse on an existing dam, which merely caused reduction of dam releases).

"discharge" as defined by the court of appeals, only a changed discharge as opposed to the addition of water or other substances to the stream. If the definition of "discharge" adopted by the court of appeals is to be followed, *no* original FERC dam license, *no* amendment of a dam license and *no* relicensing of dams will be subject to state review under § 401(a)(1).

The panel majority merely assumed *arguendo* that a dam release is a discharge, and concluded that the state certification requirement of § 401(a)(1) was not triggered here by the altered discharge resulting from the license amendment, reasoning that the discharge already existed and, therefore, was not the result of any activity authorized by the license amendment. (App. A at 20a-21a, 112 F.3d at 1188) This ignores the fact that, from the perspective of water quality impacts, the altered discharge is a different discharge: it is not the discharge initially produced when the dam was constructed.[10] Refusing to treat an altered discharge as "any discharge" within the meaning of § 401(a)(1) is inconsistent with the structure and purpose of the Clean Water Act, which:

> (1) assigns to the several states the primary responsibility for enforcing water quality standards, 33 U.S.C. § 1251(b);

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[10] Review by a state under § 401(a)(1) is based upon the particular characteristics of the discharge resulting from the federal licensing action at issue, as those characteristics may affect water quality in the receiving waters. It would frustrate the purpose of § 401 if a separate state certification were not required when the licensee seeks new federal licensing action that may result in a discharge having different characteristics and, hence, different potential water quality effects than the original discharge has.

(2) defines "discharge" in an expansive manner, 33 U.S.C. § 1362(16);

(3) employs the broad phrase "any discharge" in § 401(a)(1);

(4) defines "pollution" to include flow alteration, 33 U.S.C. § 1362(19);

(5) contemplates state review in cases of alterations of existing discharges by referring to where "the discharge originates or will originate" in § 401(a)(1); and

(6) in an analogous situation, requires a new state certification or waiver of an operating license when circumstances potentially affecting water quality; change after state certification of the construction license, 33 U.S.C. § 1341(a)(3).[11]

The majority below misapplied the plain meaning rule by lifting a single word in § 401 from its context and, without

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[11] While § 401(a)(3) does not apply here (App. A at 11a-12a, 112 F.3d at 1184), it is instructive that Congress accorded sta tes the opportunity to review proposed licensing of a project's operations under § 401(a)(1) after the state has already issued a § 401(a)(1) certification for a license for project construction in instances where there is an intervening change in circumstances causing the state to conclude that compli ance with state water quality standards can no longer be reasonably assured. To be consistent, the term "any discharge" in § 401(a)(1) should be con strued to accord states the opportunity to review a license amendment under § 401(a)(1) in instances where the characteristics of any resulting, altered discharge may have a different water quality impact than the characteristics of the original discharge.

regard to the structure and purpose of the Act,[12] imposing artificial limits on the meaning of that term.[13] The definition of "discharge" in the Clean Water Act is expansive: "The term 'discharge' when used without qualification includes a discharge of a pollutant, and a discharge of pollutants." 33 U.S.C. § 1362(16). The majority concluded, however, that the meaning of the term "any discharge" does not encompass an altered discharge and is restricted to the addition of a substance to navigable waters. App. A at 19a, 112 F.3d at 1187; *contra Power Authority of the State of New York v. Williams*, 101

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[12] *See American Mining Congress v. EPA*, 824 F.2d 1177, 1185 (D.C. Cir. 1987), *citing Burnet v. Chicago Portrait Co.*, 285 U.S. 1, 6 (1932). Because Congress carefully balanced the roles of the United States and the several states in the Clean Water Act, a federal court has a responsibility to consider each term in context and to define a broad term such as "any discharge" in light of the structure and purpose of the Act so that the federal-state balance struck by Congress is not upset. *See United Savings Ass'n of Texas v. Timbers of Inwood Associates, Ltd.*, 484 U.S. 365, 371 (1988) (whether a term is ambiguous often depends on the statutory context). The majority of the panel of the court of appeals here concluded that "discharge" is unambiguous. It summarily rejected an alternative definition advanced by RRBA and North Carolina *that had previously been embraced by FERC and EPA in this litigation*: the term "any discharge" may include a reduced discharge. FERC brief after remand, dated Dec. 24, 1996, at 11 n.9; D.A. 45622 (EPA).

[13] The majority first decided that a release cannot be "any discharge" without the addition of a substance. App. A at 19a, 112 F.3d at 1187. It then said that the term "any discharge" cannot include an altered discharge because § 401(a)(1) applies only to the original discharge, not to an altered discharge, regardless of the difference between the two in potential water quality impacts. App. A at 20a, 112 F.3d at 1188. This offends common sense and ignores the purpose of § 401. In common usage, a reduced discharge is "any discharge." And the purpose of § 401 is to allow states to determine whether a particular discharge (or a particular range of discharges) will protect state water quality standards.

A.D.2d 659, 660, 475 N.Y.S.2d 901, 904 (3d Dept. 1984). The majority reads this language as exhaustive of the meaning of "discharge" rather than as illustrative of one type of discharge. A definition that "includes" demonstrates that there are additional examples not specifically mentioned. The majority's definition, contrary to the clear intent of Congress, excludes *all* dam releases, even those authorized by original licensing and relicensing.[14]

The majority below observed that the mere withdrawal of water is not a "discharge." App. A at 20a, 112 F.3d at 1188, relying on *Save Our Community v. E.P.A.*, 971 F.2d 1155, 1165 (5th Cir. 1992). But this case involves more than the mere withdrawal of water. This case involves a license amendment approving a diversion of water that will change the licensee's dam release regime and supplant electricity generation in favor of out-of-basin municipal water supply as a fundamental project purpose. It constitutes a deliberate alteration of the licensee's dam releases in a way that may compromise water quality. If the original dam release is a "discharge" within the meaning of § 401(a)(1), then surely the alteration of that dam release by a license amendment constitutes a different "discharge" for purposes of water quality certification under that statute. When the licensee seeks licensing approval to alter its activities by selling water for non-project uses, the purpose and structure of the Clean Water Act call for a state review under § 401(a)(1) to determine whether the new circumstances (*i.e.*, the altered dam releases) may cause a violation of state water quality standards. The expansive term "any discharge" in that statute is clearly broad enough to encompass an altered discharge, and should be so construed to be consistent with the purpose and structure of

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[14] *See* discussion, *supra*, at pages 13-14.

the Clean Water Act and to avoid creating a gaping hole in its coverage.[15]

The impact of the decision of the court of appeals is not limited to projects straddling a state border, as this one does. Most of the 1,000-plus outstanding FERC licenses were issued for projects located entirely in a single state. According to the majority below, applications for FERC relicensing and license amendments involving a project lying entirely within one state will not trigger state certification under § 401(a)(1) because changing a dam's discharge does not constitute a "discharge" within the meaning of that statute.[16]

The gaping hole in the Clean Water Act left by the decision below will alter profoundly the relationship between the national and state governments in the protection of water quality. Putting more than 1,000 existing hydropower projects effectively beyond § 401(a)(1) state water quality certification will deprive states of the ability to protect their water quality standards in hundreds of waterways all across the country. This will frustrate the Act's reservation to the states of the primary

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[15] FERC contended below that the reduced discharge would not cau se a violation of the decades-old minimum flow requirement of the FERC license. Whether that claim is accurate is immaterial. The purpose of § 40 1 is to allow a state to determine whether *state* water quality standards will be protected, and those standards may be more stringent than federal requirements.

[16] Even if the Virginia Beach intake had been located in North Carolina so that both the intake and the dam were in the same state, North Carolina would have no § 401(a)(1) review opportunity under the rule adopted by the court of appeals should VEPCO later seek to sell an *additional* 60 mgd to Virginia Beach to be withdrawn through the existing intake without the need for a new § 404 construction permit.

role in establishing and enforcing water quality standards. 33 U.S.C. §§ 1251(b), 1313 and 1341; *see Keating v. FERC*, 927 F.2d 616, 622 (D.C. Cir. 1991); *United States v. Puerto Rico*, 721 F.2d 832, 838 (1st Cir. 1983).

If the Court does not to grant review in this case, the issue is unlikely to reach the Court again for years and only after many of the hundreds of relicensing applications that are due in the next several years have already been prepared and filed. To avoid unnecessary waste and confusion, the Court should address the issue now. No case will present the issue any more clearly than this case does.

CONCLUSION

The Court should grant this petition for a writ of certiorari.

Respectfully submitted,

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APPENDIX A

STATE OF NORTH CAROLINA, Petitioner,
v.
FEDERAL ENERGY REGULATORY COMMISSION,
Respondent,
The City of Virginia Beach, Virginia, Intervenor.

Nos. 95-1494, 95-1500.

United States Court of Appeals,
District of Columbia Circuit.

Argued Feb. 4, 1997
Decided May 9, 1997

On Petitions for Review of an Order of the Federal Energy Regulatory Commission.

Before: WALD, SILBERMAN and SENTELLE, Circuit Judges.

Dissenting opinion filed by Circuit Judge WALD.

SENTELLE, Circuit Judge:

Petitioners, the state of North Carolina and the Roanoke River Basin Association ("RRBA"), seek review of the decision of the Federal Energy Regulatory Commission ("FERC" or "Commission") to amend a FERC license under which a power project is operated within Lake Gaston on the Roanoke River. The amended license allows the City of Virginia Beach, Virginia to build an intake structure within the power project's

boundaries and withdraw water for transport to Virginia Beach. Petitioners maintain that FERC improperly issued the license amendment without first requiring that a water quality certification be obtained from the state of North Carolina. Petitioners further contend that the decision to issue the license amendment was arbitrary and capricious. For the reasons detailed below, we reject each of these arguments and deny the petitions for review.

I. Background

This case arises from the nearly fourteen-year effort of Virginia Beach to secure a new source of water via a 76-mile pipeline originating at Lake Gaston and terminating in Norfolk, Virginia (the "Pipeline Project"). Lake Gaston is located on the Roanoke River, a navigable waterway traversing the states of Virginia and North Carolina. While Lake Gaston is primarily located in North Carolina, the intake structure for the Pipeline Project is to be located at Pea Hill Creek Cove in Virginia. That site is within the boundaries of FERC Project No. 2009, a FERC-licensed power project (the "Power Project") operated by Virginia Electric and Power Company ("VEPCO"). Upon completion of the Pipeline Project, Virginia Beach will be able to draw up to 60 million gallons per day ("mgd") of water from Lake Gaston, reducing the discharge of water through the Power Project's dam turbines in North Carolina by that same amount. The drawn water will then be transported through a 76-mile pipeline. This will result in a net increase of 54 mgd of water to Virginia Beach's daily water supply, after adjustment for amounts lost during transport.

Construction of the Pipeline Project's intake facility was to result in sediment discharges into the waters of Lake Gaston. As a result, Section 403(a) of the Federal Water Pollution

Control Act, 33 U.S.C. § 1251 *et seq.*, otherwise known as the Clean Water Act ("CWA" or "Act"), required Virginia Beach to obtain a dredge-and-fill permit from the Secretary of the Army, acting through the Army Corps of Engineers ("Corps"). 33 U.S.C. § 1344(f)(2). The City filed its application for a Section 403(a) permit with the Corps on July 15, 1983.

Section 401(a)(1) of the CWA provides that "[a]ny applicant for a Federal license or permit to conduct any activity ... which may result in any discharge into the navigable waters, shall provide the ... permitting agency a certification from the State in which the discharge originates or will originate...." The certification must provide that the discharge "will comply with the applicable" water quality standards. *Id.* § 1341(a)(1). As for those states in which the discharge does not "originate" but which may otherwise be "affected" by the discharge, Section 401(a)(2) of the CWA provides a separate set of procedures to ensure compliance with the affected state's water quality standards. *Id.* § 1341(a)(2).

Because the Corps' dredge-and-fill permit is a "Federal license or permit" for purposes of Section 401(a)(1), Virginia Beach was required to obtain a water quality certification from the state of Virginia. Accordingly, Virginia Beach filed an application with the Virginia State Water Control Board ("VSWCB"), requesting certification of the withdrawal of up to 60 mgd of water from Lake Gaston. No certification was sought or received from North Carolina at this time. On September 12, 1983, the VSWCB issued a Section 401(a)(1) certification for the Pipeline Project, subject to certain conditions needed to preserve water quality.

Following the issuance of the water quality certification, the Corps held public hearings on Virginia Beach's application

for a dredge-and-fill permit. Both North Carolina and RRBA intervened in this proceeding. Upon conclusion of the hearings, the Corps found that 60 mgd would be needed in the Virginia Beach area by the year 2030, that the Pipeline Project would have no noticeable impact on downstream water quality, and that the project would have no significant impact on the environment. As a result, the Corps issued a dredge- and-fill permit to Virginia Beach. The issuance of this permit was ultimately upheld on appeal. *North Carolina v. Hudson*, 665 F.Supp. 428 (E.D.N.C.1987), *appeal decided after remand*, 731 F.Supp. 1261 (E.D.N.C.1990), *aff'd sub nom. Roanoke River Basin Ass'n v. Hudson*, 940 F.2d 58 (4th Cir.1991), *cert. denied*, 502 U.S. 1092, 112 S.Ct. 1164, 117 L.Ed.2d 411 (1992).

In 1991, VEPCO filed an application with FERC, requesting that the Power Project license be amended to permit the withdrawal of water for the Pipeline Project. The license for the Power Project was initially issued in 1951 by the Federal Power Commission, the predecessor of FERC. *Virginia Elec. and Power Co., Project No. 2009: Application for License Under Federal Power Act*, 10 F.P.C. 1 (1951) [hereinafter *License Application Order*]. The Federal Power Act ("FPA"), 16 U.S.C. § 791a *et seq.*, governs amendments to FERC licenses and provides that an amendment may be granted "only upon mutual agreement between the licensee and the Commission after thirty days' public notice." 16 U.S.C. § 799. Under VEPCO's requested amendment to the Power Project license, Virginia Beach would be permitted to withdraw 60 mgd of water from Lake Gaston, decreasing the flow of water through the Power Project dams by the same amount.

North Carolina intervened in the license amendment proceeding and requested that FERC prepare an environmental

impact statement ("EIS") pursuant to the National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.* On July 23, 1993, FERC issued a draft environmental assessment ("EA") tentatively concluding that the Pipeline Project would have no unmitigable adverse environmental impacts. After receiving numerous comments on the draft EA, FERC staff, on June 23, 1994, issued a final EA finding that the proposed Pipeline Project "constitutes a major federal action significantly affecting the quality of the human environment." As a result, FERC determined to prepare an EIS to "reflect updated population and water consumptive projections." In the meantime, North Carolina had petitioned the Commission to stay its proceeding until VEPCO obtained a Section 401(a)(1) certification from North Carolina's water control agency. The Commission took no action on the stay request.

On July 7, 1995, FERC issued a final EIS finding that the five-city area in the vicinity of Virginia Beach (including Chesapeake, Norfolk, Portsmouth, Virginia Beach, and Suffolk) will need 54 mgd of water by the year 2030; that the proposed water supply project will ensure Virginia Beach a safe, reliable, and relatively inexpensive source of potable water; that the Pipeline Project is the best source for meeting that water need; and that the project, subject to additional mitigation measures, should be approved. Final Environmental Impact Statement for Virginia Beach Water Supply Project at xxii [hereinafter Final EIS]. On July 14, 1995, North Carolina and RRBA filed a joint motion asking the Commission to condition any order approving the Project on North Carolina's issuance of a water quality certification pursuant to CWA § 401(a)(1). The Commission took no action on this motion.

Finally, on July 26, 1995, the Commission issued an order approving VEPCO's application to amend the license

under which the Power Project is operated. *Virginia Elec. and Power Co., Project No. 2009-003: Order Approving Non-Project Use of Project Lands and Waters and Amending License*, 72 F.E.R.C. (CCH) ¶ 61,075 (July 26, 1995) [hereinafter *License Amendment Order*]. In the order, the Commission concluded that Virginia Beach's project is "best adapted to a comprehensive plan for improving or developing the waterway for beneficial public purposes" because Virginia Beach will "be relieved of the serious water supply problems that have severely constrained the lifestyle of its citizens and clouded its economic future." *Id.* at 61,399. Relying on the findings of its Final EIS, the Commission concluded that by the year 2030 Virginia Beach and the other regional cities will need the entire 54 mgd that the Pipeline Project is designed to provide. *Id.* at 61,396. In addition, the Commission concluded that the downstream effects of the Pipeline Project withdrawals could be sufficiently mitigated by the release of the water the city had stored upstream in Kerr Reservoir. *Id.* at 61,398.

The Commission denied petitioners' request to stay its proceeding or to withhold its approval until North Carolina issued a Section 401(a)(1) certification for the Project. *Id.* at 61,393. The Commission ruled that "even assuming, *arguendo*, that the proposed amendment to the [Power Project] license to accommodate the construction and operation of Virginia Beach's water supply project is subject to the provisions of Section 401(a)(1)," the certification requirement was not triggered because the Commission's regulations require a new certification only for license amendments that will cause a " 'material adverse impact on the water quality in the discharge from the project.' " *Id.* at 61,393-94 (quoting from 18 C.F.R. § 4.38(f)(7)(iii)). Relying on the findings and conclusions of its Final EIS, the Commission concluded that a one-percent reduction in flow releases into the Roanoke River from the

project dam "will not significantly affect water quality." *Id.* at 61,394.

Petitioners moved for rehearing. On September 22, 1995, the Commission denied the motion. *Virginia Elec. and Power Co., Project No. 2009-008: Order Denying Rehearing and Denying Stay*, 72 F.E.R.C. (CCH) ¶ 61,283 (Sept. 22, 1995) [hereinafter *Rehearing Order*]. The Commission found that the need for a reliable water source in the area surrounding Virginia Beach "cannot be disputed." *Id.* at 62,216. Further, the Commission reaffirmed its prior ruling that a Section 401(a)(1) certification was not required because VEPCO's license amendment would not have a "material adverse impact on the water quality in the discharge from the project." *Id.* at 62,218. Alternatively, the Commission held that North Carolina had waived its Section 401 certification claim. *Id.* at 62,219.

Petitioners then sought review in this court, challenging FERC's decision to issue the amended license. According to petitioners, FERC violated CWA § 401(a)(1) by issuing the amended license without receiving a water quality certification from North Carolina. In addition, petitioners asserted that certain of FERC's findings necessary to justify issuance of the amended permit were arbitrary and capricious.

After the first oral argument in this case, we issued an order remanding the record and directing the Commission to determine whether the license amendment would involve "activities ... which may result in any discharge into the navigable waters" that "originate" in North Carolina within the meaning of CWA § 401(a)(1). *See North Carolina v. FERC*, No. 95-1494 (D.C.Cir. Sept.11, 1996) (order remanding record to the Commission). On remand, the Environmental Protection

Agency ("EPA" or "Agency") filed a letter with FERC stating that, in its view, the license amendment authorizing the Pipeline Project would result in such a discharge, thus necessitating a Section 401(a)(1) certification from North Carolina. Letter from Jonathan Z. Cannon, General Counsel, EPA, to Lois D. Cashell, Secretary, FERC 1 (October 24, 1996) [hereinafter EPA Letter].[1]

On November 7, 1996, FERC issued an order in which it concluded that "the activity that the Commission approved in this proceeding (the construction and operation of facilities and withdrawal of water from the Virginia Beach water supply project) is not an activity that results in a discharge originating in the State of North Carolina within the meaning of Section 401(a)(1) of the CWA." *Virginia Elec. and Power Co., Project No. 2009-010: Order on Remand*, 77 F.E.R.C. (CCH) ¶ 61,138 (Nov. 7, 1996) [hereinafter *Order on Remand*]. More specifically, the Commission found that the construction and operational activities (and any resulting discharges originating therefrom) would occur entirely in Virginia. *Id.* at 61,518. Because Virginia Beach obtained a Section 401(a)(1) certification from the state of Virginia, the Commission determined that the requirements of CWA § 401(a)(1) were satisfied. *Id.* at 61,521. We now review the Commission's orders.

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[1] Because we conclude, under the first step of *Chevron*, that congressional intent underlying Section 401(a)(1) is clear, *infra*, we find it unnecessary to resolve the thorny question as to whether EPA is entitled to deference as the arguably primary administrator of the CWA.

II. Analysis

A. Section 401(a)(1) Certification Claim.

Petitioners first challenge the Commission's conclusion that Section 401(a)(1) does not require that VEPCO obtain a water quality certification from the state of North Carolina before issuing an amendment to VEPCO's license. When reviewing "an agency's construction of the statute which it administers," we apply the two-part test developed by the Supreme Court in *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 104 S.Ct. 2778, 81 L.Ed.2d 694 (1984). The first step of the Chevron test is to ask "whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter." *Id.* at 842, 104 S.Ct. at 2781. If, however, the congressional intent is not clear, we must then ask "whether the agency's answer is based on a permissible construction of the statute." *Id.* at 843, 104 S.Ct. at 2782. As discussed in more detail below, we conclude that the congressional intent underlying Section 401(a)(1) of the CWA is clear and unambiguous.

1. Waiver

Before turning to the merits of petitioners' Section 401(a)(1) claim, we first address FERC's argument that North Carolina waived its certification right by failing to assert such during the Corps' dredge-and-fill permit proceeding. The Commission's waiver argument is premised on the view that, under Section 401(a)(1), it is a state's duty to request that a license applicant obtain a water quality certification. *See* FERC's Brief at 40 (referring to North Carolina's failure "to

assert a timely *request* for [a water quality] certification" (emphasis added)). The Commission plainly misconstrues Section 401 in this respect.

Section 401(a)(1) provides that "[n]o license or permit shall be granted until the certification required by this section has been obtained or waived *as provided in the preceding sentence*." 33 U.S.C. § 1341(a)(1) (emphasis added). The referenced preceding sentence states that a waiver occurs when a "State ... fails or refuses to act *on a request for certification*, within a reasonable period of time (which shall not exceed one year) after receipt of such request." *Id.* (emphasis added). This language clearly expresses a congressional intent to place the burden of requesting a state water quality certification on the license applicant. Only after a request has been made can a state waive its certification right, and then only by refusing to respond to the request within a reasonable period of time. VEPCO, the license applicant in this case, never requested that North Carolina provide a water quality certification for the proposed Pipeline Project. Therefore, under the plain language of Section 401(a)(1), North Carolina could not have waived its certification right.

Despite the clarity of Section 401(a)(1), FERC proposes two theories--one statutory and one common law--on which to base a finding of waiver. First, the Commission argues that CWA § 401(a)(3) creates an alternative means by which a state can waive its certification right. Section 401(a)(3) provides that "[t]he certification obtained pursuant to [CWA § 401(a)(1)] with respect to the construction of any facility shall fulfill the requirements of this subsection with respect to certification in connection with any other federal license or permit required for the operation of such facility." 33 U.S.C. § 1341(a)(3). As the Commission reads Section 401(a)(3), any state having

certification rights as to the operation of a licensed activity must intervene and assert those rights at the time a license is granted to construct the facilities. Failure to intervene at the time a construction license is granted will, according to FERC, result in a waiver of the right to certify the operation of the project. In support of this argument, the Commission cites *Keating v. FERC*, 927 F.2d 616, 620 (D.C.Cir.1991), in which we stated that "under section 401(a)(3) of the Clean Water Act, ..., FERC was obliged to accept the certification underlying the Corps permit as satisfying the state certification with respect to ... [the FERC] license application."

To be sure, Section 401(a)(3) does provide that a certification obtained during a facility's construction stage will satisfy the Section 401(a)(1) certification requirement at the project's operational stage. Section 401(a)(3) does not, however, require a state with certification rights pertaining only to the operation of a project to assert those rights at the time a construction permit is issued for the project. By its terms, Section 401(a)(3) provides only that a construction certification actually "obtained" from a state will satisfy the certification requirement as to the operation of the project. As discussed above, no water quality certification was obtained from North Carolina at the construction stage of the Pipeline Project. Only the state of Virginia certified the Project's construction.

The Commission responds that it is irrelevant for purposes of Section 401(a)(3) that only Virginia certified the construction of the Pipeline Project. As the Commission reads Section 401(a)(3), a certification obtained at a project's construction stage from the state in which construction discharge will originate obviates the need to obtain a certification from those other states in which a discharge will originate as a result of the project's operation. To the extent a state in which an

operational discharge will originate wishes to exercise its right to certify the operation of a project, that state must intervene and assert its certification rights during the construction permit proceeding. We disagree.

Section 401(a)(3) provides that obtaining a construction-stage certification satisfies the need to obtain an operational certification from "the certifying State." *See* 33 U.S.C. § 1341(a)(3). Not one word of Section 401(a)(3) in any way indicates that the construction-stage certification satisfies the need to obtain an operational certification from another state in which only an operational discharge will originate. Nor does the section require that such other state intervene in the construction permit proceeding and assert its right to certify the operation of the project. Indeed, to so hold would place the burden of requesting a certification on the certifying state directly contrary to Section 401(a)(1)'s express requirement that the license applicant initiate the "request for certification." *Id.* § 1341(a)(1).

The *Keating* case upon which FERC relies in attempting to avoid this interpretation of Section 401(a)(3) is easily distinguishable. In *Keating*, the state of California issued a blanket certification in connection with an applicant's request for a Corps' dredge-and-fill permit. 927 F.2d at 619- 20. When a party subsequently attempted to use the blanket certification to obtain a FERC license, the state purported to revoke its earlier certification. *Id.* at 620. On petition for review, we held that once a state grants certification in a dredge-and-fill permit proceeding, "section 401(a)(3) permits state revocation of the prior certification only if certain conditions are met." *Id.* at 624. Absent such conditions, "FERC was obliged to accept the certification underlying the Corps permit as satisfying the state certification requirement with respect to

Keating's [FERC] license application." *Id.* at 620. In this case, as there was no "prior certification" by the state of North Carolina but only by the state of Virginia, the Keating case is inapposite.

The Commission's second theory of waiver is based on the common law doctrine of claim preclusion. The Commission would have us read that doctrine into Section 401(a)(1). During the dredge-and-fill permit proceeding, the Corps specifically considered the environmental impacts not only of the project construction, but also of its operation and resultant discharges in North Carolina. Further, the Corps proceedings involved the same issues, parties, and discharge as are involved in the proceeding before FERC. As a result, the Commission argues, North Carolina's failure to raise its Section 401(a)(1) certification claim before the Corps should bar it from raising the claim in this proceeding.

In response, North Carolina argues that the common law defense of claim preclusion cannot now be raised because it did not form the actual basis for FERC's order. While it is true that "a reviewing court, in dealing with a determination or judgment which an administrative agency alone is authorized to make, must judge the propriety of such action solely on the grounds invoked by the agency," *Securities & Exch. Comm'n v. Chenery Corp.*, 332 U.S. 194, 196, 67 S.Ct. 1575, 1577, 91 L.Ed. 1995 (1947), it appears that the Commission's order was based in part on the doctrine of claim preclusion. The Commission's *Rehearing Order* states that North Carolina's certification right was "waived" and also refers to the fact that consideration of the certification claim "would reopen an issue that has already been put to rest by the ... Corps ... and the courts in the *Hudson* litigation." 72 F.E.R.C. at 61,218-19. These statements indicate that FERC did rely, at least in part, on the doctrine of

claim preclusion in rejecting North Carolina's certification claim.

Nevertheless, we believe that the Commission erred in reading the doctrine of claim preclusion into Section 401(a)(1). As discussed above, that section clearly provides that a Federal license or permit may not be granted "until the certification required by [Section 401(a)(1)] has been obtained or has been waived" as a result of a state's "refus[al] to act on a request" for such in a timely manner. 33 U.S.C. § 1341(a)(1). We see no room for the doctrine of claim preclusion in such a precisely worded provision. To hold otherwise would, in our view, require us to usurp the legislative function. This we cannot do.

In sum, we do not believe that North Carolina waived its certification right. We therefore turn to the merits of the certification claim.

2. Merits

Petitioners maintain that the Commission improperly interpreted Section 401 of the CWA and, as a result, erroneously issued an amended license to VEPCO without first requiring that a water quality certification be obtained from the state of North Carolina. As quoted above, Section 401(a)(1) of the CWA provides that "[a]ny applicant for a Federal license or permit to conduct any activity ... which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate...." 33 U.S.C. § 1341(a)(1). In the case of a license amendment, a Commission regulation interpreting this section requires the applicant to obtain a new water quality certification only "if the amendment

would have a material adverse impact on the water quality in the discharge from the project." 18 C.F.R. § 4.38(f)(7)(iii) (1995).

In the initial order granting an amendment to the Power Project license, the Commission assumed *arguendo* that the activity licensed by the amendment would result in a "discharge." However, relying on its regulation, the Commission concluded that a water quality certification from North Carolina was unnecessary given that "the amendment to the license [would] not have a 'material adverse impact on the water quality in the discharge from the project.' " *License Amendment Order*, 72 F.E.R.C. at 61,393-94 (quoting 18 C.F.R. § 4.38(f)(7)(iii)).

After the first oral argument in this case, we remanded the record to the Commission to answer the "logically antecedent" question whether the proposed amendment to the Power Project license to accommodate the construction and operation of the Pipeline Project is subject to the provisions of Section 401(a)(1). *See North Carolina v. FERC*, No. 95-1494, at 1-2 (D.C.Cir. Sept.11, 1996) (order remanding record to Commission). On remand, the Commission altered its reasoning on the Section 401(a)(1) issue, concluding that a water quality certification was unnecessary because the license amendment would not result in a "discharge" as that term is used in Section 401(a)(1). *See Order on Remand*, 77 F.E.R.C. at 61,517. Alternatively, the Commission found that "even if the word 'discharge' is ultimately determined to be broad enough to include the removal of water," the license amendment would still not be subject to the requirements of Section 401(a)(1) as "the activity involved in enabling such removal occurs entirely (i.e., for CWA purposes 'originates' in) Virginia, and not in North Carolina." *Id.* at 61,518.

As an initial matter, we note that on remand the Commission discarded 18 C.F.R. § 4.38(f)(7)(iii) as an alternative basis for upholding the decision not to require that a water quality certification be obtained from North Carolina. As a result, we need not address the legality of that regulation despite our serious reservations concerning FERC's attempt to redefine the statutory phrase "any discharge," 33 U.S.C. § 1341(a)(1), to mean only those discharges that are "material," 18 C.F.R. § 4.38(f)(7)(iii). We need only review the Commission's interpretation of Section 401(a)(1) itself.

Petitioners argue that the Commission's orders misinterpret the requirements of Section 401(a)(1). According to petitioners, the relevant statutory "activity" is VEPCO's "substantially altered operation" of the Power Project under which less water will flow through the dam turbines thus generating less electricity. These alterations in the operation of the Power Project will, petitioner argues, "result in an altered discharge."[2] Alternatively, petitioners argue that the relevant "activity" is the operation of the Pipeline Project, which will result in "a new and different discharge." In either case, petitioners contend, a discharge "originates" at the point where water exits the dam turbines in North Carolina under the

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[2] Our dissenting colleague suggests that "[l]ogically, if a State must consent before a new discharge is introduced into its waters, then a change in that discharge must require a new consent." Dissent at 1195. The logic escapes us. The statute provides that the right of certification arises from a n "activity ... which may result in any discharge...." The triggering event is the causation of the discharge. Under our colleague's reasoning, a statute referring to "conduct resulting in injury" would include conduct which reduced injury. A transaction "resulting in financial loss" would include a transaction which prevented financial loss. Neither in those hypotheticals nor in this actual case does either logic or language lead us to our colleague's conclusion.

Supreme Court's holding in *PUD No. 1 of Jefferson County v. Washington Dep't of Ecology*, 511 U.S. 700, 114 S.Ct. 1900, 128 L.Ed.2d 716 (1994). As a result, they conclude that a Section 401(a)(1) certification from North Carolina was required.

The Commission responds that the "activities" licensed in this case are the construction and operation of the Pipeline Project. The construction of the Pipeline Project resulted in a discharge of dredged material only in Virginia. The operation of the Pipeline Project, by contrast, will result in no "discharge" at all as the Project will only withdraw water from and add nothing to Lake Gaston. The fact that the amended license will result in an "altered discharge" at the North Carolina dam cannot, FERC argues, constitute a basis for granting certification rights to North Carolina. To hold otherwise would render superfluous Section 401(a)(2) governing the rights of those states affected by license amendments.

We agree with the Commission that the "activities" licensed by the amendment are the construction and operation of the Pipeline Project. As no party contends that the *construction* of the Pipeline Project resulted in a discharge "originat[ing]" in North Carolina, only the *operation* of the Project is relevant for our purposes. Even assuming *arguendo* that the flow of water through the Power Project dam turbines is a "discharge" as that

term is defined in the CWA,[3] we fail to see how operation of the Pipeline will "result in any discharge."

The Lake Gaston Power Project has operated under a FERC license for many years. *See License Application Order*, 10 F.P.C. at 18-19. Under that license, water has been passing through the dam turbines. Had the license amendment not been granted, water would have continued passing through the dam turbines. The amendment does not permit VEPCO to release additional water through the turbines. It simply permits VEPCO "to authorize the City of Virginia Beach, Virginia to withdraw up to 60[mgd] of water from the Project No. 2009 Lake Gaston reservoir." *License Amendment Order*, 72 F.E.R.C. at 61,400. These facts lead us to agree with FERC that the "activity" authorized by the license amendment is the operation of the Pipeline Project and its resultant withdrawal of water from Lake Gaston.

We recognize that the withdrawal of water from Lake Gaston will reduce the volume of water passing through the dam turbines. But neither the withdrawal of water from the Lake nor the reduction in the volume of water passing through the dam turbines "results in a discharge" for purposes of Section 401(a)(1). 33 U.S.C. § 1362 is the definitional section for chapter 26 of Title 33, the chapter that includes the CWA. That

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[3] Our dissenting colleague suggests that *PUD No. 1, supra*, and *National Wildlife Fed'n v. FERC*, 912 F.2d 1471 (D.C.Cir.1990) (per curiam), compel the conclusion that we assume. While we do not interpret either of those opinions as compelling such a conclusion, since we are willing to assume so for purposes of this case, there is no point in our pursuing the distinctions at any length. Suffice it to say that we are s atisfied for the reasons set forth at pp. 1188-89, *infra*, that a construction of the statutory language herein is in no way inconsistent with *PUD No. 1* or *National Wildlife*.

section does not provide an express definition of the term "discharge" but rather provides a statement of inclusion: "The term 'discharge' when used without qualification includes a discharge of a pollutant, and a discharge of pollutants." 33 U.S.C. § 1362(16). Thus, we find useful in our analysis 33 U.S.C. § 1362(12), which defines the terms "discharge of a pollutant" and "discharge of pollutants" as "mean[ing] (A) any addition of any pollutant of navigable water from any point source, and (B) any addition of any pollutant to the waters to the contiguous zone ... from any point source other than a vessel or other floating craft." Thus, although the focus of the definitional section is on the regulation of pollutants rather than the general regulation of project discharges, the nearest evidence we have of definitional intent by Congress reflects, as might be expected, that the word "discharge" contemplates the addition, not the withdrawal, of a substance or substances.[4]

On the evidence of record, the operation of the Pipeline Project will not result in the "addition" of anything to the waters of Lake Gaston. Obviously, the withdrawal of water from Lake Gaston will add nothing; nor will the withdrawal of water from

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[4] Our dissenting colleague "reject[s] the majority's 'substance-adding' threshold condition on the exercise of State certification rights." Dissent at 1196. The threshold is not ours, but Congress's. Granted, the congressional instruction of "discharge" in 33 U.S.C. § 1362(16) does not define discharge, but rather describes it as including "discharge of a pollutant" which Congress has heretofore defined in § 1362(12) as "mean[ing] ... any *addition* of any pollutant ...." (emphasis added). It would seem to us apparent that since Congress meant "discharge" to in clude "discharge of a pollutant" then Congress intended the word "discharge" to be defined in the inclusive use consistently with the included use. Therefore, if "discharge of a pollutant" requires addition, then the inclusive understanding of "discharge" also requires an addition. Indeed, we have seen no definition of "discharge" in any source, including the dissent, whi ch suggests that that term includes withdrawal or reduction.

Lake Gaston increase the volume of water flowing through the turbines of the Project dams. Indeed, that is petitioners' very point; the volume of water flowing through the turbines will decrease as a result of the project. *Order on Remand*, 77 F.E.R.C. at 61,519-20. A decrease in the volume of water passing through the dam turbines cannot be considered a "discharge" as that term is defined in the CWA. *Save Our Community v. United States EPA*, 971 F.2d 1155, 1165 (5th Cir.1992) (holding that removal of water from wetlands is not a "discharge" for purposes of Section 404 of the CWA).

We are not persuaded by petitioners' argument that Section 401(a)(1) confers certification rights upon North Carolina merely because operation of the Pipeline Project will "result in an altered discharge" through the dam turbines. Stating that operation of the Pipeline Project will "result in an altered discharge" is simply a way of saying in legalese that operation of the Pipeline Project will alter the discharge. However, the existence of certification rights under Section 401(a)(1) does not depend on whether a discharge is "altered." Section 401(a)(1) certification rights vest only if an activity "may result in" a discharge. This distinction is of no small moment. The word "alter" means to change something from its previous state, WEBSTER'S NEW INT'L DICTIONARY 63 (3rd ed.1961) ("to cause to become different"), implying that the thing changed was already in existence. By contrast, the word "result" implies causation. *See id.* at 1937 ("arise as a consequence"). Obviously, a subsequent event cannot be the cause of something that is already in existence. Given the disparity between petitioners' proposed test and the words of the Act, we elect to remain faithful to the language chosen by Congress and require that an activity "result in" a discharge in order to trigger the certification requirements of Section 401(a)(1).

Our conclusion that the operation of the Pipeline Project will not result in a "discharge" is in no way inconsistent with the Supreme Court's opinion in *PUD No. 1, supra*. In that case, the state of Washington had issued a water quality certification under Section 401(a)(1) imposing a variety of conditions on the proposed project, including a minimum stream flow requirement. 511 U.S. at 709, 114 S.Ct. at 1907-08. The license applicants argued that the minimum stream flow requirement was unlawful in that it was "unrelated to the [ ] specific discharges" at issue. *Id.* at 711, 114 S.Ct. at 1908. The Supreme Court rejected this argument, stating that:

> If § 401 consisted only of subsection (a), which refers to a state certification that a "discharge" will comply with certain provisions of the Act, petitioners' assessment of the scope of the State's certification would have considerable force. Section 401, however, also contains subsection (d), which expands the State's authority to impose conditions on the certification of a project.

Id. at 711, 114 S.Ct. at 1908-09. As the Court read Section 401, subsection (a) "identifies the category of activities subject to certification--namely those with discharges"--while subsection (d) authorizes a state to place "additional conditions on the activity as a whole once the threshold condition, the existence of a discharge, is satisfied." *Id.* at 711-12, 114 S.Ct. at 1909. But the Court never attempted to define a discharge and in no way indicated that an alteration of a discharge was sufficient to invoke the certification requirement of Section 401(a)(1). *PUD No. 1* therefore is inapposite.

Nor is our conclusion that the operation of the Pipeline Project will not result in a "discharge" in conflict with our holding in *National Wildlife Fed'n, supra*. In *National Wildlife*,

we held that the Commission did not abuse its discretion in concluding that the discharge resulting from the construction and operation of a new dam "originate[d] by the dam" where the flow of water was blocked resulting in a water backup. 912 F.2d at 1484. This holding is distinguishable in two respects from the case at hand. First, the parties in *National Wildlife* did not dispute whether the construction and operation of the dam would create a discharge. The issue there was where that discharge would "originate." *See id.* at 1483-84. In addition, the *National Wildlife* case involved the creation of a discharge as a result of the construction and operation of a new dam. *Id.* at 1473. That case did not involve an alteration (much less a volume reduction) of a preexisting discharge.

Because we conclude that the withdrawal of water from Lake Gaston resulting in a decrease in the volume of a preexisting discharge is not an activity that "results in any discharge" for purposes of the Section 401 of the CWA, we must reject petitioners' claim that the Commission erred when it granted VEPCO's request for a license amendment without requiring that a water quality certification first be obtained from the state of North Carolina.

B. Arbitrary and Capricious Claims.

Petitioners also assert that the findings underlying the Commission's decision to grant the amendment to VEPCO's license were not supported by substantial evidence and that the decision itself was arbitrary and capricious. Under the FPA, we review a Commission licensing decision to determine whether the factual findings underlying the decision were "supported by substantial evidence." 16 U.S.C. § 825l(b). We also review Commission licensing decisions to determine whether they were "arbitrary and capricious." *Bangor Hydro-Electric Co. v.*

FERC, 78 F.3d 659, 663 & n. 3 (D.C.Cir.1996). In both cases, the review is quite deferential. So long as the Commission has examined the relevant data and provided a "reasoned explanation supported by a stated connection between the facts found and the choice made," we will defer to the agency's expertise. *United States Dep't of Interior v. FERC*, 952 F.2d 538, 543 (D.C.Cir.1992). Applying these principles of review, we consider each of petitioners' claims.

1. Need for 54 mgd of water.

Petitioners first challenge the Commission's conclusion that there is a "need" for the Pipeline Project. Section 10(a) of the FPA provides that the project for which a Commission license is issued must

> be such as in the judgment of the Commission will be best adapted to a comprehensive plan of improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water-power development, for the adequate protection, mitigation, and enhancement of fish and wildlife ..., and for other beneficial public uses, including irrigation, flood control, *water supply*, and recreational and other purposes....

16 U.S.C. § 803(a)(1) (emphasis added). The parties all agree that, under this provision, the Commission could only issue the license amendment authorizing the Pipeline Project if the Commission, in its judgment, determined that there is a need for 54 mgd of water in Virginia Beach. The only issue here is whether the Commission's conclusion that there is such a need was supported by substantial evidence.

The Commission relied on the findings of its Final EIS in concluding that the five-city Virginia Beach region would need 54 mgd of water by the year 2030. *Rehearing Order*, 72 F.E.R.C. at 62,216. The Final EIS calculation of water need was derived from three figures: (1) projected water demand in the five- city region by the year 2030, (2) projected supply in that region by 2030, and (3) a drought margin. Final EIS at 1-6 to 1-22. The demand projection was a function of the five-city region's projected population and per capita water use in the year 2030. *Id.* at 1-9 to 1-13. Projected supply was based on the "safe yield" of available water sources in the five-city region. *Id.* at 1-16 to 1-20. The difference between the projected supply and the projected demand equaled the water supply deficit for the five-city region. *Id.* at 1- 20. Then, in order to ensure "sound water supply planning," a drought margin was added to the water supply deficit to reach the 54 mgd of water need. *Id.* at 1-21. Petitioners challenge each step of this water need calculation. We consider these challenges in turn.

a. Population Projection.

Petitioners first contest the Commission's population projection for the year 2030. In formulating its population projection, the Commission had before it six different population projections, only four of which attempted to project the five-city region's population through the year 2030. The Commission elected not to use any of the 2030 projections. Instead, the Commission selected the population projection prepared by the Hampton Roads Planning District Commission ("HRPDC") which projected the population of the five-city region through the year 2015. That projection, according to the Commission, was "the most reasonable in that [it] considered local economic factors ... and the recent decrease in the region's

growth rate." Final EIS at 1-12. The Commission then extrapolated the HRPDC projection through 2030 using the average annual growth rates underlying two of the four 2030 projections. The result was a population projection of 1,306,000 for the five-city region.

Petitioners argue that this projection was arbitrary and capricious in that extrapolation of the HRPDC estimate was based on growth rates from projections the Commission had "rejected as *too high*." North Carolina's Brief at 32. We disagree. The Commission explained that the HRPDC estimate was chosen as "the most reasonable" because it considered "local economic factors." While the Commission's calculation of an extrapolation rate was based on the average growth rates from population projections rejected by the Commission as less "reasonable" than the HRPDC projection, the fact that these estimates were less "reasonable" does not necessarily make them unreasonable or arbitrary. Projections of any kind--especially those extending 40 years into the future--are necessarily speculative, inexact, and riddled with uncertainty. But at times, such as here, projections must be made. The mere fact that the Commission relied on necessarily imperfect information in calculating an extrapolation rate for the years 2015 to 2030 does not render the projection arbitrary. An agency need not "have perfect information before it takes any action." *United States Dep't of the Interior v. FERC*, 952 F.2d 538, 546 (D.C.Cir.1992). In the face of "serious uncertainties," an agency need only "explain the evidence which is available, and ... offer a 'rational connection between the facts found and the choice made.' " *Motor Vehicle Mfrs. Ass'n of the United States v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 52, 103 S.Ct. 2856, 2871, 77 L.Ed.2d 443 (1983) (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168, 83 S.Ct. 239, 245-46, 9 L.Ed.2d 207 (1962)). The Commission has done so.

b. Per Capita Use Projection.

Petitioners also contest FERC's projected per capita water use figure of 118 gallons per capita per day ("gpcd") as arbitrarily inflated. First, RRBA contends that the Commission reached its projected water use rate simply by taking the 1990 actual use rate for the five-city region of 121 gpcd and subtracting 3 gpcd to account for future improvements in water use efficiency. Reliance on a single year's data to develop a long-term projection is, according to RRBA, arbitrary and capricious.

RRBA's depiction of the process by which the Commission developed its water use projection is without basis in the record. The Commission clearly explained that its projected use figure was the product of a long-term "trend analysis." *Rehearing Order*, 72 F.E.R.C. at 62,217. In reaching its projection, the Commission began by noting that the use projections for Virginia Beach alone "cluster[ed] around 100 gpcd" with actual use in 1990 for the entire five-city region equaling 121 gpcd. Final EIS at 1-12. The Commission went on to explain that it expected these figures to rise as Virginia Beach and its surrounding areas became more urbanized. *Id.* at 1-12 to 1-13. However, the Commission also recognized that water conservation measures required by the Federal Energy Policy Act of 1992 were likely to result in a demand reduction of approximately 3.7 mgd. *Id.* at 1-13 to 1-15. Taking all of these factors into account, the Commission concluded that a projected per capita use rate of 118 gpcd was "reasonable for planning purposes." *Id.* at 1-15.

North Carolina asserts that the Commission's water use projection is arbitrary as demonstrated by Virginia Beach's concession that water use in the five-city region is declining.

North Carolina too misstates the record. Virginia Beach did not concede that water use in the five-city region is declining, but only that it had "decline[d] slightly between 1990 and 1994." The Commission recognized and explained this decline as an expected year-to- year variation in demand.

North Carolina also asserts that Virginia Beach conceded that the water use data in the Commission's Final EIS was erroneous. Again, North Carolina misinterprets the record. What the city actually conceded was that one of the many figures relied upon by the Commission in developing a 40-year water use projection contained some minor computational errors. North Carolina, however, has not demonstrated that the erroneous figure was integral to the Commission's water use projection or that revision of the figure would result in an altered projection. As a result, the error was harmless. *See Chemical Waste Mgmt., Inc. v. United States EPA*, 976 F.2d 2, 32 (D.C.Cir.1992), *cert. denied*, 507 U.S. 1057, 113 S.Ct. 1961, 123 L.Ed.2d 664 (1993).

North Carolina further argues that the Commission's water use projection of 118 gpcd is grossly excessive in light of the actual per capita water use in Virginia Beach during 1990 of 89 gpcd. This argument too is not persuasive. The Commission elected to project a water use rate for the entire five-city region, rather than for Virginia Beach alone "because of the existing interconnectedness of the system and the growing trend toward regional water sharing." *Rehearing Order*, 72 F.E.R.C. at 62,216. While the Commission's projected use figure for the five-city region exceeds the actual use figure for Virginia Beach, it is significantly less than the actual use rates of the more urbanized municipalities in the region such as Norfolk (166 gpcd) and Portsmouth (160 gpcd). Moreover, the Commission expected that per capita use rates in Virginia Beach

and the other municipalities would likely increase as those areas became more urbanized. Final EIS at 1-12 to 1-13. These considerations led the Commission reasonably to conclude that a projected use rate of 118 gpcd was most appropriate.

Still further, petitioners together argue that the Commission's use rate projection is arbitrary in that it was developed without reference to more recent use rate data. According to petitioners, the Commission relied solely on 1990 use rate data in developing its projection despite the fact that more recent data indicated that use rates are declining. Petitioners contend that the Commission's failure to utilize this more recent data was arbitrary and capricious. We must again disagree with petitioners.

As discussed above, the assertion that the Commission relied solely on 1990 use rate data in developing its use rate projection is without merit. Moreover, the Commission clearly explained its decision not to rely on the more recent water use data. According to the Commission, the more recent data was "somewhat misleading" in that it considered "finished water only" and was "not corrected to account for water from municipal wells of the portion of the population not served by public water." When the data was adjusted to account for these deficiencies, the Commission concluded that it showed only a small decline in per capita water use which was easily explained as an expected year- to-year variation in a long-term demand projection. *Rehearing Order*, 72 F.E.R.C. at 62,217. RRBA challenges the accuracy of this explanation on several grounds. However, the Commission refused to consider each of these arguments on the ground that they were not raised in a timely motion for reconsideration. *Id.* at 62,217 n. 11. The review provisions of the FPA provide that a party "aggrieved by an order issued by the Commission ... may apply for a rehearing

within thirty days after the issuance of such order." 16 U.S.C. § 825l(a). An objection not raised before the Commission in a timely request for rehearing may not be considered by this court. *Id.* § 825*l*(b). There is no dispute that petitioners did not contest the Commission's explanation within the thirty-day time period. As a result, we are precluded from considering the issue on appeal.

c. Water Demand Projection.

Relying on its population and water use projections, the Commission derived a water demand figure for the five-city region for the year 2030. The Commission first adjusted its population projection of 1,306,000 to reflect the fact that only approximately 93.8 percent of the population will be served by public water in 2030. Multiplying this adjusted population figure by the projected per capita water use figure of 118 gpcd, the Commission reached a projected water demand for the five-city region of 144.6 mgd. Final EIS at 1- 15 to 1-16.

RRBA argues that the Commission erred in concluding that 93.8 percent of the five-city region's population would be served by public water in 2030. However, this claim was not raised in petitioners request for rehearing. We are therefore barred from considering the issue on appeal. 16 U.S.C. § 825l(b).

d. Water Supply Projection.

Petitioners next challenge as arbitrary the Commission's projected water supply "safe yield" of 112.8 mgd. "Safe yield" is defined as the quantity of raw water that could be withdrawn from a water source during the worst dry period of record since 1930 without depleting the source. Final EIS at 1-16 to 1-17.

Petitioners first argue that FERC's calculation of water supply arbitrarily excluded 3 mgd of water available from aquifer storage and recovery ("ASR") systems. In its *Rehearing Order*, the Commission explained that the ASR system was not relevant to the calculation of water supply in that it "is not a new source of water." An ASR system "merely stores water from the existing supply for retrieval at a later date," and thus is not relevant to a calculation of long-term water supply. *Rehearing Order*, 72 F.E.R.C. at 62,217. The Commission further explains the relevance of its grounds for rejecting the ASR system data by noting that "an ASR system can accommodate only short term (seasonal) supply and demand; it does not resolve the significant long term regional water deficit described in the FEIS." *Id.* North Carolina's position that the ASR is relevant to the water available to a portion of the five-city area may be a reasonable one. However, FERC has considered and rejected that position in the language quoted above. It is not our role under an arbitrary and capricious review to reweigh the evidence, and we cannot say that the Commission's response to this comment was so unreasonable as to fail the deferential standard we must apply.

Petitioners make much of the fact that the Commission's draft EIS erroneously concluded that the Chesapeake ASR system had been abandoned due to cost. However, this error was not repeated in the Commission's *Rehearing Order*. *See* 72 F.E.R.C. at 4006. A final agency order is not rendered arbitrary and capricious simply because preliminary agency decisions contained errors. "Indeed, the very purpose of issuing tentative decisions is to afford the Commission an opportunity to correct any errors." Freeman Eng'g Assocs., Inc. v. FCC, 103 F.3d 169, 179 (D.C.Cir.1997).

Finally, petitioners assert that the Commission, without explanation, excluded from its calculation of water supply 2 mgd of water available through reservoir modifications. As we read the *Rehearing Order*, the Commission's discussion of ASR systems was also meant to apply to the reservoir modification issue. Neither ASR systems nor reservoirs are new sources of water; both simply store water from existing supplies for use at a later time. Thus, under the Commission's reasoning, neither was relevant to a calculation of longterm water supplies. We recognize that the Commission's discussion of this issue was far from a model of clarity. But petitioners' discussion of the issue in their request for rehearing was tucked away in a footnote in a paragraph primarily devoted to a discussion of ASR systems. Under these circumstances, the Commission "cannot be asked to make silk purse responses to sow's ear arguments." *City of Vernon v. FERC*, 845 F.2d 1042, 1047 (D.C.Cir.1988).

e. Drought Margin.

Having projected water supply and demand for the five-city region, the Commission subtracted the former from the latter to reach a regional water supply deficit of 31.8 mgd. To this figure the Commission added a drought margin of 22.2 mgd to reach the projected water need of 54 mgd. Final EIS at 1-20 to 1-21. Petitioners raise several objections to this drought margin.

Petitioners first contend that a drought margin of any size is unnecessary given that the Commission's calculation of water supply was based on the "safe yield" which is defined as the quantity of raw water that could be withdrawn from a water source during the worst dry period of record since 1930 without depleting the source. We reject this argument. While the Commission's calculation of water supply was based on the

quantity of water available during drought conditions, the calculation also assumed "complete interconnection and optimization of the five-city water systems ..., the imposition of mandatory water use restrictions or rationing during droughts, and depletion of water storage during a drought of equal or greater severity than that on which the safe yield estimates are based." Final EIS at 1-20 to 1-21. But as the Commission explained, these assumptions are not consistent with "sound water supply planning" given that: (1) especially severe droughts might occur, (2) water sharing within the five-city region was not guaranteed, (3) water restrictions create public health and safety risks, and (4) future water demand might exceed projections. *Id.* at 1-21. It was to protect against these eventualities that an additional drought margin was included. We cannot say that such precautions are arbitrary or capricious.

In addition to objecting to the drought margin *per se*, North Carolina also objects to the Commission's calculation of the margin. North Carolina contends that it was arbitrary for the Commission to calculate the drought margin without taking into account the 50 mgd of water available from emergency wells during droughts. We disagree. The emergency wells in the five-city area are all owned by the jurisdictions surrounding Virginia Beach. While the wells are presently being leased back to Virginia Beach, these leases all expire by 1998 and the surrounding jurisdictions have indicated that they do not intend to renew the leases. *Rehearing Order*, 72 F.E.R.C. at 62,217. Therefore, it was entirely appropriate for FERC to exclude emergency well supplies when calculating the quantity of water that will be available for drought emergencies in the year 2030.

In a similar vein, North Carolina also argues that, in calculating the drought margin, the Commission arbitrarily failed to consider demand management techniques that could be

employed during times of drought. This argument is without merit. The Commission clearly explained that it considered demand management techniques such as water rationing and use restrictions to be a threat to public safety and health. Final EIS at 1-21. For this reason, such measures were rejected as a solution to the five-city region's long-term water supply deficit.

Finally, RRBA argues that the Commission erred in simply adopting a Corps calculation of the necessary drought margin without independently verifying the Corps calculation. *See* 40 C.F.R. § 1506.5. The Commission contends that we should not reach this argument because it was not advanced before the Commission. In their rehearing motion, petitioners objected to the Commission's reliance on population and water use projections supplied "by the cities to be served by the project and the [HRPDC]." Rehearing Motion at 8. Petitioners did not object to the Commission's reliance on the Corps' drought margin calculation. We therefore agree with the Commission that petitioners waived this objection. 16 U.S.C. § 825l(b).

In sum, we hold that the Commission's calculation of water need for the five- city region was supported by substantial evidence and was neither arbitrary nor capricious.

2. Kerr Reservoir

Petitioners also maintain that the Commission failed to respond to significant comments concerning the availability of Kerr Reservoir water for purposes of mitigating the Pipeline Project's environmental effects on the Roanoke River. As mentioned above, the Commission prepared an EIS for the Pipeline Project analyzing the effects of the Project on the Roanoke River Basin. Final EIS at 3-1, 5-2. The EIS

concluded that the Project withdrawals will "not have any significant adverse effects" on the Basin. *Id.* at 6-4. This conclusion was premised on the Commission's belief that the water Virginia Beach had stored in Kerr Reservoir would be available for release to mitigate the Project's downstream effects. *Id.* at 4-31. Petitioners contend, however, that evidence before the Commission demonstrated that Virginia Beach was not legally entitled to order releases from Kerr Reservoir.

Petitioners' argument is without merit. The Commission concluded in its *License Amendment Order* that "Virginia Beach would be able to use its stored water to replace withdrawals on a gallon-for-gallon basis" to meet the striped bass target flows. 72 F.E.R.C. at 61,398. This conclusion appears consistent with the provisions of Virginia Beach's contract with the Corps for the storage of water in Kerr Reservoir which provides that Virginia Beach has the "right to order releases to be made" subject only to the government's rights to maintain downstream releases to meet established water requirements, to preserve life and/or property, and to maintain the project facilities. *See* Contract Between the United States of America and the City of Virginia Beach for Water Storage in Kerr Reservoir at 3. To the extent that evidence presented by petitioners contradicted the express language of this contract, it was rejected by the Commission.

3. Other Claims.

Petitioners claim that the Commission's decision was arbitrary and capricious in numerous other respects. Having considered each of these arguments carefully, we find them unworthy of separate discussion. Suffice it to say that we reject each of the additional claims.

III. Conclusion

For the foregoing reasons, we conclude that the Commission was not required to obtain a water quality certification from the state of North Carolina prior to granting the amendment to VEPCO's license for FERC Project No. 2009. We further conclude that the Commission's order granting the license amendment was neither arbitrary nor capricious. We therefore deny the petition for review.

WALD, Circuit Judge, dissenting:

The majority holds (1) that the Federal Energy Regulatory Commission ("FERC") did not err in granting the Virginia Electric and Power Company ("VEPCO") an amendment to its license for the Lake Gaston power project authorizing the withdrawal of sixty million gallons per day of project water without requiring VEPCO to obtain a water quality certification from the State in which the power project's "discharge" originates, and (2) that FERC's decision to issue this license amendment was not arbitrary and capricious. I disagree with both of these propositions.

A. *North Carolina's Clean Water Act § 401(a)(1) Certification Rights*

The first paragraph of the Federal Water Pollution Control Act, popularly known as the Clean Water Act ("the Act"), declares that its goal is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). The second subsection sets forth Congress' overarching policy in the Act, of "recogniz[ing], preserv[ing], and protect [ing] the primary responsibilities and rights of States to prevent, reduce, and

eliminate pollution...." *Id.* at § 1251(b). The Act charges each State with the duty of instituting comprehensive standards establishing quality goals for all intrastate waters. *See* 33 U.S.C. §§ 1311(b)(1)(C), 1313.

Section 401(a)(1) of the Act, 33 U.S.C. § 1341(a)(1), implements the policy of empowering States to protect their water quality programs by authorizing them to veto federal licenses or permits that threaten to undermine the quality of their waters. Specifically, § 401(a)(1) requires "[a]ny applicant for a Federal license or permit to conduct any activity ... which may result in any discharge into the navigable waters" to provide the licensing or permitting agency with "a certification from the State in which the discharge originates or will originate" that the discharge does not threaten the water quality standards that the State has implemented pursuant to other provisions of the Act. *Id.* I disagree with the majority's conclusion that North Carolina had no such certification right with regard to this license amendment, because I believe it ignores the language, structure, and purpose of the Act, and wrests away from North Carolina the very power to make water quality judgments about its own waterways that Congress expressly meant for that State alone to have.

The § 401 certification right is an essential component of the Act's state-oriented regulatory scheme. *See Keating v. FERC*, 927 F.2d 616, 622 (D.C.Cir.1991) ("The States remain, under the Clean Water Act, the prime bulwark in the effort to abate water pollution ... Congress intended that the States would retain the power to block, for environmental reasons, local water projects that might otherwise win federal approval.") (citation and internal quotation marks omitted). Obviously, how courts construe the Act's language specifying those situations in which States may wield this powerful weapon can critically

affect their ability to protect the integrity of their waters in the way Congress intended. Too stingy an interpretation of § 401(a)(1) will severely burden each State's ability to implement the water quality program mandated by the Act, and will frustrate Congress' clear intent to institute a system under which States carry both the responsibility of setting their own water quality standards and a corresponding power to protect those standards from federally-licensed activities that threaten to undermine them. It is precisely because the § 401(a)(1) certification right is so vital to each State's ability to maintain its water quality that thirty-nine States signed an *amicus* brief strongly opposing FERC's assertion that North Carolina has no certification rights over this license amendment. *See* Brief of *Amici Curiae* States of Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Mexico, New York, North Dakota, Ohio, Oklahoma, Pennsylvania, South Dakota, Texas, Utah, Vermont, Washington, West Virginia, and Wyoming.

The majority assumes *arguendo* that the flow of water through the power project's turbines in North Carolina is a § 401(a)(1) "discharge" implicating that State's certification rights, and this assumption is in fact required under the precedents set by the Supreme Court,[1] this court,[2] and FERC.[3]

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[1] *See PUD No. 1 of Jefferson County v. Washington Dep't of Ecology*, 511 U.S. 700, 711, 114 S.Ct. 1900, 1908, 128 L.Ed.2d 716 (1994) ("There is no dispute that petitioners were required to obtain a certification from the State pursuant to § 401. Petitioners concede that, at a minimum, the project will result in two possible disch arges--the release of dredged and fill material during the construction of the project, and the

Furthermore, it appears that North Carolina will wield a § 401(a)(1) certification right in 2001, when the project's license will expire and VEPCO will request a new license. *See* Brief for Appellant Roanoke River Basin Association at 18-22. Yet the majority reaches the paradoxical conclusion that FERC may approve this license amendment, which all parties concede will alter the North Carolina "discharge," without requiring any certification from North Carolina. It is candidly difficult for me to get past this conundrum: Logically, if a State must consent before a new discharge is introduced into its waters, then a change in that discharge must require a new consent.[4] A

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discharge of water at the end of the tailrace after the water has been used to generate electricity.").

[2] *See National Wildlife Federation v. FERC*, 912 F.2d 1471, 1484 (D.C.Cir.1990) ("Common sense supports FERC's conclusion that the discharge in this case would occur at the dam, where the flow of water would be blocked and consequently the water would be backed up....").

[3] *See City of Fort Smith*, 42 F.E.R.C. ¶ 61,362 at 62,047 (1988) ("In the case of the Lee Creek project, the discharge will occur over the dam and from the powerhouse tailrace ...."), *on reh'g*, 44 F.E.R.C. ¶ 61,160 at 61,513 (1988), *aff'd*, 912 F.2d 1471 (D.C.Cir.1990).

[4] The majority questions the logic of this assertion by arguing that it would be irrational as applied to statutes that refer to "conduct resulting in injury" and "transactions resulting in financial loss." *See* majority opinion at 1186 n.2. But these analogies are clearly inapt. The more appropriate analogy would be to an argument that a statute referring explicitly to conduct that threatens to cause one *type* of injury or loss might be construed also to cover closely related types of injury or loss, rather than to an argument that a statute referring to conduct that causes some injury or loss should be construed also to cover conduct that causes the *reduction* of these ills. After all, the record before us involves a situation in which a reduction in a discharge may *increase* the very sort of "injury" to a State's water quality that the Act seeks to empower States to prevent. *See infra.*

question might, of course, be raised as to whether some license amendments are so clearly outside of the scope of § 401(a)(1) as to create no certification rights; license amendments that propose to alter a project in a way that will have no effect on an existing discharge, or that will have at most a *de minimis* effect on the discharge, may perhaps be granted without requiring a new certification from the State in which the discharge originates.[5] But the majority imposes a far more sweeping and arbitrary limitation on State certification rights, by declaring that no alteration of a discharge triggers a certification right unless it represents an "addition ... of a substance or substances" to the discharge. Majority opinion at 1187.

I reject the majority's "substance-adding" threshold condition on the exercise of State certification rights. It badly distorts the definitions section of the Act, and improperly usurps crucial judgments on water quality that Congress reserved for the States into which the discharges flow. The initial flaw is the majority's characterization of the Act's definition of "discharge of a pollutant" as "the nearest evidence we have of definitional intent by Congress" as to when States have certification rights under § 401(a)(1). *Id.* The Act's legislative history says otherwise. The language creating certification rights in States

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[5] Additionally, there is in all cases the threshold requirement that a discharge covered by the license in question must "originate" within the State claiming a § 401(a)(1) certification right. The rights of "affected" States that cannot satisfy this threshold condition are defined in § 401(a)(2). *See* 33 U.S.C. § 1341(a)(2). Since there is no question that a discharge covered by the license that FERC amended originates in North Carolina, my interpretation would not by any means make § 401(a)(2) superfluous, *cf.* majority opinion at 1186 (summarizing FERC's arguments); if North Carolina were not the locus of a discharge covered by the license to be amended, its rights would be defined by § 401(a)(2), as are the rights of downstream "affected" States in regard to this license amendment.

in which a "discharge" may "originate" as a result of federally-licensed activities first appeared as part of the Water Quality Improvement Act of 1970, Pub.L. No. 91-224, 84 Stat. 91 (1970). The phrase "discharge of a pollutant," on which the majority leans so heavily, was nowhere to be found in that early version of the Act. It was only added with the passage, two years later, of the Federal Water Pollution Control Act Amendments of 1972, Pub.L. No. 92-500, 86 Stat. 816 (1972), which introduced it in conjunction with a set of provisions requiring permits for the "discharge of pollutants." 33 U.S.C. § 1342. Because the bare-bones term "discharge" was part of the Act before the 1972 amendments, and because it wasn't until two years later that Congress organized its new permit program around the separately coined and defined phrase "discharge of a pollutant," the notion that the latter phrase provides compelling evidence of the meaning of the former term is totally unpersuasive.

An even stranger facet of the majority's statutory analysis is its insistence that "near[er]" evidence of Congress' "definitional intent" as to what constitutes a discharge can be found by looking at the Act's definition of the phrase "discharge of a pollutant" than by relying on the Act's own definition of the very term under discussion--"discharge." The Act expressly states that the term " 'discharge' when used without qualification *includes* a discharge of a pollutant, and a discharge of pollutants." 33 U.S.C. § 1362(16) (emphasis added). The only inference I can discern from this clear expression of nonexclusivity in the definition of "discharge" is that it was meant to encompass a wider array of interferences with the navigable waters than would qualify as "discharges of pollutants." *See National Wildlife Federation v. Gorsuch*, 693 F.2d 156, 171-72 (D.C.Cir.1982) (distinguishing between statutory definitions that specify what a term "means" and those

that offer a non-exclusive listing of what a term "includes").[6] How the majority manages to limit the scope of the unqualified term "discharge" to one subset that is "include[d]" in the broader term is beyond my ken.

Further evidence that Congress intended for States to have the power to protect their waters from interferences created by changes to a "discharge" that do not comprise the "addition" of any "substance or substances" is observable in the Act's treatment of the term "pollution." Section 304 of the Act "expressly recognizes that water 'pollution' may result from 'changes in the movement, flow, or circulation of any navigable waters....' " *PUD No. 1*, 511 U.S. at 719-20, 114 S.Ct. at 1913 (quoting 33 U.S.C. § 1314(f)). The Environmental Protection Agency's regulations implementing the Act likewise express a concern with interferences that have "flowage effects."

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[6] I cannot fathom the majority's reasoning that, since the phrase "discharge of a pollutant" describes the addition of substances to the water, Congress meant for the term "discharge" also to refer only to the addition of substances to the water. *See* majority opinion at 1187 n.4. I find the majority's reasoning untenable--it seems far more reasonable that, by retaining the term "discharge" unmodified by the words "of a pollutant," Congress must have intended that the term would have a broader meaning when used *without* these restrictive modifying words than it does when used *with* these restrictive modifying words. And this broader meaning should encompass the subtraction of part of an existing discharge because, as I explain *infra*, the subtraction of water from a discharge may be just as harmful to a waterway as the addition of substances to the water. Under the majority's reasoning, even the initial construction of this power project--which created a new discharge in North Carolina--would not have triggered any certification rights in North Carolina if § 401(a)(1) had then been in effect, provided that the project did not add any substance to the water that passed through the dam turbines. Such a result, of course, would be at odds with the majority's assumption *arguendo* that the flow of water through a power project's turbines is a discharge. *See* majority opinion at 1187.

Id. I had thought it beyond dispute that even alterations of existing discharges that do not "add" any "substance or substances" to the water may yet affect the water's "movement, flow, or circulation," that this effect may constitute "pollution," and that "[i]t is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of *States* to prevent, reduce, and eliminate pollution." 33 U.S.C. § 1251(b) (emphasis added).[7] Yet the majority is comfortable in wrenching away from a State this very power to protect its

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[7] Employing the currently popular "dictionary jurisprudence," the majority reasons that the "activity" here--the diversion of water to Virginia Beach--will not "result in" a discharge, as required by § 401(a)(1), *see* majority opinion at 1188, because the activity authorized by the license amendment gives rise only to an "altered" discharge, rather than a brand new one. I fail to see how this dictionary exercise provides any compelling reason to ignore the implications of the Act's State- enforcement policy and central concern with preventing and eliminating "pollution." To the contrary, it would block a State's certification rights even in the case of a license amendment authorizing the "addition" of a "substance or substances" to an existing discharge, since the "addition" of substances merely "alters" a discharge, and does not cause the discharge to "arise as a consequence" of the addition. *Id.* I find the majority's use of the dictionary to support its assertion that there is no hint of ambiguity in § 401(a)(1), *see id.* at 1183 n. 1, unacceptable; to my mind, there is certainly enough ambiguity to justify consideration of the purpose and structure of the Act in determining the scope of States' certification rights. After all, the Act defines the term "discharge" in a purposely open-ended fashion, *see* 33 U.S.C. § 1362(16), and § 401(a)(1) doesn't even require concrete certainty that a discharge will "result" from the activity to be licensed--it requires State certification for any activity that "*may* result in" a discharge. 33 U.S.C. § 1341(a)(1) (emphasis added). Imposing dictionary-derived limitations on the Act is particularly dangerous in this context and invites egregious abuses--for example, a licensee could obtain a State's certification of a minor, non-threatening discharge and then transform the discharge into a pollution-causing nightmare, evading the State's power to prevent the change by characterizing it as merely as merely an "alteration" of an existing discharge.

water quality from the "pollution" threatened by the alteration of an existing discharge.

The majority's niggardly construction of the term "discharge" threatens a congressional policy permeating the general structure of the Act, a policy specifically declared in the Act's second subsection: States were to be put in charge of making and enforcing the crucial judgments surrounding water quality within their borders. *See* 33 U.S.C. § 1251(b). When a federally-licensed activity would "result in" a "discharge" into the State's waters, the decision whether that interference with the State's waters would be tolerated was to belong solely to the State in which that discharge originated, not to a federal agency or to a federal court. Given the relative competency of State water quality agencies and federal courts, this policy seems quite sound. The waterways that we judges see only as lines on a diagram are in reality extraordinarily complex and sensitive systems in which water, oxygen, dissolved minerals, sediment, and other materials intermingle and interact. Interferences with the integrity of a waterway need not take the archetypal form of sludge spewing from an outfall; other changes can be just as deadly to fish and other wildlife as are toxic chemicals. For example, alterations that cause the temperature of the water in a discharge to rise, or that rearrange the spatial distribution of oxygen, sediment, or minerals in the downstream water, could be catastrophic from the perspective of water quality, *see Gorsuch*, 693 F.2d at 163-64.[8] Yet the effect of this court's

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[8] In *Gorsuch*, this court observed that the term "pollutant" might reasonably include such "Dam-Induced Water Quality Changes" as low dissolved oxygen, dissolved minerals, heat, sediment, and oxygen "supersaturation," *Id.* at 161, 166, though we deferred to the EPA's interpretation of the term "pollutant," in a different section of the Act, as not including these effects. *See id.* at 183.

decision will be to bar States in which altered discharges originate from acting to protect their waters from such pernicious effects, whenever the alteration does not "add" any "substance or substances" to the water. I do not believe Congress intended to give this court's essentially *ad hoc* and inevitably inexpert judgments precedence over the expert judgments of the States' water quality authorities, in the making of such crucial determinations.

The majority itself recognizes, in expressing "serious reservations" about FERC's ability to limit by regulation States' certification rights to license amendments that might have a "material adverse impact" on the water quality in a discharge, that judgments intrinsically related to water quality in the context of the alteration of existing discharges are the sole province of the States in which the discharges originate. *See* majority opinion at 1186 (quoting 18 C.F.R. § 4.38(f)(7)(iii) (1995)). By empowering itself to make a threshold determination regarding whether an alteration in a discharge threatens a "material adverse impact" on the State's water quality, FERC is taking from the State a power that Congress intended for the State alone to have. Section 401(a)(1) enables States to raise an absolute bar to federal licenses that threaten their waters; Congress completely stripped federal agencies of the power to issue covered licenses without the State's certification. Indeed, FERC is assigning itself a function which makes no sense in light of the structure of the Act, which puts each State in charge of authoritatively defining the term "water quality" within its borders--why, in this one context, should a federal agency be able to stand in a State's shoes and make the State's "water quality" determinations for it? Thus, I share the majority's concerns about FERC's regulation, but I can't help but wonder why the majority doesn't feel the same discomfort about its own arrogation of a similar power to preempt a State's

water quality determinations. Congress did not intend for this court to usurp North Carolina's power to manage its water quality program any more than it intended to give FERC such a role, and surely we are as ignorant as FERC on the subject of what "water quality" is optimal for the citizens of North Carolina.

The Supreme Court and our own court have previously exercised appropriate reluctance to read the Clean Water Act in the arbitrary and artificial fashion proffered today. When a city and a utility district urged the Supreme Court in *PUD No. 1* to adopt a formalistic approach very much like the majority's, the Court categorically refused. The *PUD No. 1* petitioners asserted that the Clean Water Act is concerned only with water "quality," and does not regulate water "quantity." *See PUD No. 1*, 511 U.S. at 717-19, 114 S.Ct. at 1912. The Supreme Court rejected this "artificial distinction," *id.*, noting that water quantity is closely related to water quality, and that both the definitions section and § 304 of the Act set forth a "broad conception of pollution" which "expressly evinces Congress' concern with the physical and biological integrity of water." *Id.* at 719, 114 S.Ct. at 1913. And in *National Wildlife Federation* this court likewise recognized that the Clean Water Act is not to be constrained by artificial limitations such as the majority's "substance-adding" standard. In that case, we found that the "backing up" of water by a dam constituted a § 401(a)(1) "discharge," *see National Wildlife Federation*, 912 F.2d at 1483-84; in so doing, we apparently recognized that an interference with a river that results in the alteration of the "movement, flow, or circulation" of water (and thus causes "pollution") is cause for the recognition of a certification right

in the State where this discharge originates.[9] Since the "backing up" of water does not satisfy the majority's "substance-adding" standard, it is clear that today's holding is in tension with our own precedent.[10]

Instead of crafting an arbitrary and exceedingly formalistic new standard governing the scope of State certification rights under § 401(a)(1), we should be traversing the main channel charted by the Act, the Supreme Court, and our own precedent. These authorities require us to find that the license amendment at issue in this case is one that triggers a certification right in North Carolina, the State in which the project's discharge originates. Thus I would suspend consideration of the other challenges to these orders, and require FERC to await a § 401(a)(1) certification from North Carolina before considering whether to grant the amendment.

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[9] In that case, we declined to recognize a certification right in the upstream State, however, because we found that the discharge "originate[d]" at the dam, which was located downstream in another state. *See id.* at 1484.

[10] The majority disclaims tension between this case and *National Wildlife Federation* on the grounds that the parties in that case did not dispute the question of whether the construction and operation of the dam would create a discharge, and that the discharge at issue related to a new dam, rather than to the altered operations of an existing dam. *See* majority opinion at 1188. But the *National Wildlife* opinion refers to the expulsion of water through the dam's turbines as a § 401 "discharge," and describes the "discharge" as follows: "[T]he discharge in this case would occur at the dam, *where the flow of water would be blocked and consequently the water would be backed up* ...." *National Wildlife Federation*, 912 F.2d at 1484 (emphasis added). The fact that the "backing up" of water resulted from th e construction of a new dam, rather than from the alteration of an existing dam, played no part in the *National Wildlife Federation* court's analysis.

B. FERC's Finding of a Need to Withdraw Sixty Million Gallons of Water per Day

Even if North Carolina's failure to certify the license amendment were not contrary to the Act, however, I would vacate the challenged orders and remand this matter to FERC on the ground that FERC's estimate of the "need" for the fifty-four million gallons per day to be supplied by the pipeline project was arbitrary and capricious.

FERC had already reached the conclusion that Virginia Beach needed to withdraw sixty million gallons of the Roanoke River per day by October of 1994, when it declared that "[n]o new analysis" of this estimate was necessary. Scoping Document 2, FERC No.2009-003; Deferred Appendix "D.A." at 2547, 2551. It is hardly surprising, therefore, that FERC's July, 1995 Final Environmental Impact Statement arrived at this precise estimate of Virginia Beach's "need." Nor is it surprising that FERC's attempt to disguise the fact that it was "backing into" this number fails rather badly.

I agree with my colleagues that the first few steps in FERC's analysis were tolerably reasonable. FERC organized its analysis into separate projections of the demand for water in the year 2030 and of regional supply in that year. The basic structure of the inquiry was sound, as was the projection of the region's 2030 demand for water. But when FERC turned to the supply side of the equation, its logic became curiouser and curiouser. On the apparent assumption that the water supply from existing sources would remain constant through 2030, FERC's projection of 2030 supply was based on the water available from existing sources. Specifically, FERC's supply estimate was based on the amount the residents of the region could withdraw from the existing water sources during the worst

drought of record since 1930; this drought occurred in 1930, and the U.S. Geological Survey estimates that such droughts may recur at intervals of between thirty and eighty or more years. The estimated "Water Supply Deficit" for 2030, based on this drought-adjusted supply, came out to 31.8 million gallons per day.

Common sense would seem to indicate that the obvious way to prepare for short- term periods of special water need is to create water storage systems that can be filled during nondrought periods, exhausted to meet these short-term needs when they arise, and refilled when the droughts recede. But FERC rejected all of the storage options pressed by participants in the proceedings below, arguing that storage techniques were irrelevant to its "need" calculation because storage systems do not constitute "sources" of water, and because they serve only short-term need. *See* majority opinion at 1192. Of course, the fact that storage systems aren't new "sources" of water in the sense of meeting long-term, continuous demand hardly justifies FERC's refusal to consider the availability of these systems, because they just as clearly are precisely suited to serve short-term periods of special demand that occur at intervals more than long enough to permit the storage systems to be replenished, and thus could be used to obviate any increment in the quantity of water to be *constantly* supplied to the region to protect it from droughts of extraordinary severity.

A similar illogic permeates FERC's attempt to explain its refusal to take account of the water available from the region's wells. FERC specifically refused to factor in the water available from two Norfolk wells on the ground that these wells were meant to be used only during droughts that threaten military readiness, and FERC likewise thought it unnecessary to consider the water available from unspecified "emergency wells" in the

region on the ground that their use was restricted to municipally-declared emergencies.[11] The Corps, FERC noted, "considers these wells as protection against extreme droughts." D.A. at 3166. I can only speculate as to what the terms "municipal emergency" and "extreme drought" are meant to cover, if not droughts more severe than the worst since 1930. FERC's reasoning falls far short of providing any rational or even vaguely comprehensible explanation for its refusal to integrate into its need calculation the water available from "emergency" wells and water storage systems--the most intuitively obvious strategies for dealing with infrequent, short-term, emergency water needs.

Having rejected the commonplace strategies that would enable the region to weather droughts, but would not enable FERC to claim that a pipeline continuously withdrawing sixty million gallons of water per day was needed, FERC's next step was to ratchet its "need" estimate up to that amount. For this final adjustment, FERC set out five reasons for its conclusion that a second "drought adjustment" was necessary, explaining that merely covering the 31.8 million gallon per day "deficit" was insufficient because:

. it provides no protection against droughts of greater severity than those that occurred in the past;

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[11] The majority asserts that FERC's refusal to consider the water in these wells in its estimate of the regional supply was appropriate because these wells may not be available for use by Virginia Beach after next year. *See* majority opinion at 1193. But this portion of FERC's analysis was based on the supply of water available to the *region*, rather than to Virginia Beach alone, and therefore it is irrelevant that this emergency supply may become unavailable to one of the cities in the region.

- there is no guarantee that water sharing would occur among the cities;
- severe water use restrictions would continue to place local users at a public health and safety risk;
- future water demands may exceed projections; and
- loss of a water supply in this large metropolitan area would be catastrophic.

D.A. at 3167, *see also* majority opinion at 1193. For these "reasons," FERC concluded that it was necessary to jack up the "need" estimate to include another thirteen to sixty-eight million gallons per day of continuous supply. But these "reasons" simply amount to FERC's generalized worry that its entire analysis leading up the 31.8 million gallon per day "deficit" might be flawed in such a way as to make its need estimate too low. If water were an unlimited, free resource, it might seem appropriate to double the estimate of water "need" in case actual need were to exceed all expectations, but if water were an unlimited, free resource, nothing much would turn on whether FERC's "need" estimate satisfied any baseline standard of rationality. FERC itself recognizes that the amount of water to be removed from the river must correspond to a rational calculation of actual "need," and thus makes a show of reaching this estimate by using the available data and reasonable assumptions; it cannot at the end of the game simply knock the pieces off the chessboard in the name of unforeseen contingencies and unprecedented emergencies, and still claim that it did not act arbitrarily or capriciously because it played by the rules *almost* to the end.

Because, finally, I believe that the license amendment FERC approved by its challenged order may not be granted consistently with § 401(a)(1) of the Clean Water Act unless and until North Carolina has certified that the activity to be conducted pursuant to the amendment does not threaten that State's water quality standards, I would vacate FERC's order and rehearing order, and remand the matter to FERC with the instruction that it withhold the amendment pending North Carolina's certification. Even if I did not believe that FERC's failure to require VEPCO to obtain North Carolina's certification was illegal, I would still vacate these orders on the ground that they were arbitrary and capricious, and would remand the matter to FERC for an estimate of Virginia Beach's "need" for water that gives due consideration to storage options and "emergency" sources. On both of these grounds, I respectfully dissent from the majority opinion.

APPENDIX B

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 95-1494 **September Term, 1996**

State of North Carolina,
Petitioner

v.

Federal Energy Regulatory Commission,
Respondent

The City of Virginia Beach, Virginia,
Intervener

Consolidated with 95-1500

On Petitions for Review of an Order of the
Federal Energy Regulatory Commission

BEFORE: Wald, Silberman and Sentelle,
Circuit Judges

JUDGMENT

These causes came on to be heard on the petitions for review of an order of the Federal Energy Regulatory Commission and were argued by counsel. On consideration thereof, it is

ORDERED and **ADJUDGED**, by the Court, that the petitions for review are denied, in accordance with the opinion for the Court filed herein this date.

FOR THE COURT:
Mark J. Langer, Clerk

By: /s/ Robert A. Bonner
Robert A. Bonner
Deputy Clerk

Date: May 9, 1997

Opinion for the Court filed by Circuit Judge Sentelle.
Dissenting opinion filed by Circuit Judge Wald.

APPENDIX C

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 95-1494

September Term, 1996

State of North Carolina,
Petitioner

v.

Federal Energy Regulatory Commission,
Respondent

The City of Virginia Beach, Virginia,
Intervener

Consolidated with 95-1500

BEFORE: Wald, Silberman and Sentelle, Circuit Judges

ORDER

Upon consideration of the petitions for rehearing filed by the State of North Carolina and the Roanoke River Basin Association, and of the responses thereto, it is

ORDERED that the petitions be denied.

Per Curiam

FOR THE COURT:
Mark J. Langer, Clerk
By: /s/ Robert A. Bonner
Robert A. Bonner
Deputy Clerk

APPENDIX D

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 95-1494 **September Term, 1996**

State of North Carolina,
Petitioner

v.

Federal Energy Regulatory Commission,
Respondent

The City of Virginia Beach, Virginia,
Intervener

Consolidated with 95-1500

BEFORE: Edwards, Chief Judge; Wald, Silberman, Williams, Ginsburg, Sentelle, Henderson, Randolph, Rogers, Tatel and Garland, Circuit Judges

ORDER

The Suggestions For Rehearing In Banc of the State of North Carolina and the Roanoke River Basin Association and of the responses thereto have been circulated to the full court. The taking of a vote was requested. Thereafter, a majority of the judges of the court in regular active service did not vote in favor of the suggestions. Upon consideration of the foregoing, it is

ORDERED that the suggestions be denied.

Per Curiam

FOR THE COURT:
Mark J. Langer, Clerk

By: /s/ Robert A. Bonner
Robert A. Bonner
Deputy Clerk

Circuit Judges Wald and Tatel would grant the suggestions.

Circuit Judge Randolph did not participate in this matter.

APPENDIX E

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 95-1494 **September Term 1996**

State of North Carolina, et al.

v.

Federal Energy Regulatory Commission

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and consolidated case No. 95-1500

Before: WALD, SILBERMAN, AND SENTELLE, Circuit Judges

REMAND OF THE RECORD

On September 9, 1996, this Court heard oral argument in *State of North Carolina, et al. v. Federal Energy Regulatory Commission.* It appears from the record, briefs, and oral argument that the Federal Energy Regulatory Commission ("Commission"), in the proceedings below, declined to decide a question that is of central importance to this case, and is logically antecedent to many of the other material issues presented in the case. The Court, therefore, on its own motion, remands the record to the Commission with instructions that the Commission supplement the record with its decision of the question identified below within 60 days of issuance of this order.

Petitioners have asked this Court to hold that the Commission violated § 401(a)(1) of the Clean Water Act by its

"Order Approving Non-Project Use of Project Lands and Waters and Amending License" ("FERC Order") for Project No. 2009-003, a hydropower project straddling the Virginia-North Carolina border. *See Virginia Electric and Power Company*, "Order Approving Non-Project Use of Project Lands and Waters and Amending License," 72 F.E.R.C. par. 61,075 (July 26, 1995). The Order amended the project license to permit the city of Virginia Beach to construct and operate a water intake facility within the project boundary on the Virginia side, which would withdraw project waters for transport via a pipeline to Virginia Beach. The withdrawal of project waters in Virginia would in turn reduce the amount of water flowing through the project dams in North Carolina.

Section 401 (a)(l) of the Clean Water Act provides, in pertinent part:

> Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate . . . that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title . . . . If the State . . . fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application. No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence.

Petitioners allege here, as they did before the Commission, that, by granting a license amendment authorizing the withdrawal of project waters on the Virginia side, the Commission violated § 401(a)(1) because the proposed withdrawal of project waters is an "activity . . . which may result in [a] discharge into the navigable waters" which discharge would "originate" in North Carolina, and because North Carolina has neither certified that this discharge would comply with the applicable sections of the Clean Water Act, nor waived certification.

In its order, the Commission responded to petitioners' claim, but expressly declined to decide the question of whether § 401(a)(1) applies to this license amendment to require a certification from North Carolina. Rather, the Commission quoted from § 401, then said the following:

> However, even assuming, *arguendo,* that the proposed amendment to the Project No. 2009 license to accommodate the construction and operation of Virginia Beach's water supply project is subject to the provisions of section 401(a)(1), the amendment does not trigger the requirement for certification under that section. Section 4.38(f)(7)(iii) of the Commission's regulations provides in pertinent part:
>
> > [A]ny application to amend an existing license . . . requires a new request for water quality certification . . . if the amendment would have a material adverse impact on the water quality in the discharge from the project . . . .
>
> The impact of an approximately one percent reduction in flow releases into the Roanoke River from

> the project dam is exhaustively analyzed in the FEIS, as summarized above and discussed below. We conclude, based on that analysis, that the amendment to the license will not have a material adverse impact on the water quality in the discharge from the project. Accordingly, the license can be amended without water quality certification (or waiver thereof) from North Carolina.

FERC Order, 72 F.E.R.C. at 61,393-94.

This language leaves unresolved the question of whether § 401(a)(1) applies to require a certification from North Carolina, insofar as the Commission "assum[ed], *arguendo*" that the answer was "yes" and proceeded to rest its action on Section 4.38(f)(7)(iii) of its regulations. Following initial briefing and oral argument, the Court believes that in the interest of judicial economy the Commission should answer this question before we exercise judicial review over the other issues of the case.

This Court will retain jurisdiction over this case until the Commission has supplemented and returned the record with its answer to the question posed above, at which time additional briefing or argument may be scheduled.

Per Curiam

FOR THE COURT:
Mark J. Langer, Clerk

By: /s/ Cheri Carter
Deputy Clerk

APPENDIX F

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 95-1494 **September Term, 1996**

State of North Carolina,
Petitioner

v.

Federal Energy Regulatory Commission,
Respondent

The City of Virginia Beach, Virginia,
Intervener

Consolidated with 95-1500

BEFORE: Wald, Silberman and Sentelle,
Circuit Judges

ORDER

Upon consideration of the motion to modify remand of the record, it is

ORDERED, on the court's own motion, that the court's order filed September 11, 1996, remanding the record be amended as follows:

Page 2, Paragraph 1, line 3

Delete the words:

"proposed withdrawal of project waters"

and insert in lieu thereof:

"alteration of the Project and its operations resulting from the withdrawal of project waters"

Per Curiam

FOR THE COURT:
Mark J. Langer, Clerk

By: /s/ Linda Jones
Linda Jones
Deputy Clerk

APPENDIX G

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Virginia Electric and Power Company) **Project No. 2009-003**

ERRATA

(August 23, 1995)

ORDER APPROVING NON-PROJECT USE OF PROJECT LANDS AND WATERS AND AMENDING LICENSE

(Issued July 26, 1995)

On page 2, section I. BACKGROUND, the third and fourth sentences should have read as follows: The license is for a 50-year term, expiring on January 31, 2001. The total capacity of the project is 277.9 MW, consisting of 100 MW for the Roanoke Rapids development and 177.9 MW for the Lake Gaston development.

On pages 23 - 25, ordering paragraph (C) should have numbered the new license articles as Articles 44, 45, 46, 47 and 48.

Lois D. Cashell
Secretary

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: **Elizabeth Anne Moler, Chair;**
Vicky A. Bailey,
James J. Hoecker,
William L. Massey, and
Donald F. Santa, Jr.

Virginia Electric and Power Company **Project No. 2009-003**

ORDER APPROVING NON-PROJECT USE OF PROJECT LANDS AND WATERS AND AMENDING LICENSE

(Issued July 26, 1995)

Virginia Electric and Power Company (Virginia Power) operates the Gaston and Roanoke Rapids Project No. 2009 pursuant to a license issued by the Commission under Part I of the Federal Power Act (FPA).[1] The project is located on the Roanoke River in Virginia and North Carolina.

On February 20, 1991, Virginia Power filed, on behalf of the City of Virginia Beach, Virginia, an application for Commission approval of Virginia Beach's proposal to withdraw certain water from the project reservoir, Lake Gaston, and to construct and operate a water intake facility within the project boundary for that purpose. The water would be supplied to Virginia Beach for consumption.

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[1] 15 U.S.C. §§ 792-823(b).

The Commission published notice of the application. The states of North Carolina, the Town of Weldon, North Carolina, Virginia Beach, the Roanoke Rapids Sanitary District, the Roanoke River Basin Association, the Sierra Club, the North Carolina Wildlife Federation, and the R. C. Wildlife Club Inc. filed timely motions to intervene and automatically became parties to the proceeding by operation of the Commission's Rules of Practice and Procedure. The National Marine Fisheries Service (NMFS) and the North Carolina Farm Bureau Federation motions to intervene out of time were granted by the Secretary on June 20, 1991. These and many other interested persons filed written comments.

We have carefully considered all of these expressions of view, and all of the evidence in the voluminous record before us. For the reasons discussed below, we will approve Virginia Beach's proposed withdrawal of water from the Project No. 2009 reservoir and will also amend Virginia Power's license as needed in light of that approval. In reaching this decision, however, we are very cognizant of the concerns expressed by the other parties the proceeding. We fully recognize the importance of protecting the interests of persons living downstream from the project in North Carolina, as well as those who live in the vicinity of Lake Gaston. Those interests have been very forcefully and eloquently brought to our attention by the State of North Carolina and a multitude of both public officials and private citizens. We believe that the conditions attached to our authorizations will fully protect those who are so vitally concerned about the water diversion.

I. BACKGROUND

The Commission issued a license to construct and operate the Roanoke Rapids Project in 1951.[2] The license was amended in 1960 to authorize construction and operation of the Gaston development.[3] The license is for a 50-year term, expiring on January 24, 2001.[4] The total capacity of the project is 277.9 MW, consisting of 177.9 MW for the Roanoke Rapids development and 100 MW for the Lake Gaston development.

Virginia Beach's Lake Gaston water supply project will divert approximately one percent of the average annual flow of the Roanoke River for consumptive use in Virginia Beach. The water will be transported to Virginia Beach in a 76-mile-long pipeline. Virginia Beach will compensate Virginia Power for the value of the lost electric generation attributable to the water withdrawn.

The project dams are located in North Carolina. The project reservoir is located in both North Carolina and Virginia.

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[2] The license was issued by the Commission's predecessor, the Federal Power Commission. See 10 FPC 1 (1951). The license include standard articles (L-Form, Articles 1 through 6 and 8 through 18) that are printed at 23 FPC 537,544 (1960).

[3] 23 FPC 537. For other amendments to the license, see 16 FPC 862 (1956), 17 FPC 716 (1957), 24 FPC 352 (1960), 31 FPC 1141 (1964) and 52 FPC 1067 (1974).

[4] On March 27, 1995, Virginia Power filed with the Commission a copy of its First Stage Consultation Package, in which it stated that it plans to file an application for a new license for the project on or before January 31, 1999.

The facilities for supplying water to Virginia Beach will be located in Virginia.

Under the proposal, Virginia Beach will be permitted to use project land and water to withdraw up to 60 million gallons per day (mgd) of water for municipal water supply purposes. The water from Lake Gaston will supply four Virginia municipalities: the City of Virginia Beach (48 mgd), the City of Chesapeake (10 mgd), Isle of Wight County (1 mgd), and the Town of Franklin (1 mgd). The 60 mgd withdrawal will increase the treated water safe yield by only 54 mgd, because of transmission losses associated with delivery, storage, and treatment of Lake Gaston water.

The parts of the water supply project that will be within the Project No. 2009 boundary are: two wedge-wire screen intake assemblies approximately 200 feet from the eastern shoreline of Pea Hill Cove in Lake Gaston, at an elevation of 185 feet,[5] with slot openings of 1.0 millimeter and a maximum velocity through the slot of 0.5 feet per second (each intake will connect to a pumping station that will have a design capacity of 60 mgd); a mitigation facility to enhance walleye spawning in Pea Hill Cove, consisting of submerged riprap covering 1/3 acre of lake bottom approximately 600 feet from the intake structure; a boat ramp, pier, boathouse, and appurtenant facilities along the Pea Hill Cove shore, to enable inspection and maintenance of Virginia Beach's in-water facilities and for collection of water quality samples; and approximately 250 feet of underground 60-inch-diameter concrete pipe and associated facilities crossing a minor tributary 4o Pea Hill Cove, about 4,000 feet east of the pump station on project lands.

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[5] All elevations are in feet above mean sea level.

In addition to the facilities within the Project No. 2009 boundary, the water supply project will include a 76-mile-long 60-inch-diameter pipeline, largely underground, which will convey water from Lake Gaston to the Ennis Pond Channel of Lake Prince in Suffolk, Virginia, crossing five counties. Lake Prince is the current location of a raw water intake and distribution facility operated by the City of Norfolk.

The pipeline will require a permanent right-of-way at least 30 feet wide. Approximately 90 percent of the pipeline will follow existing railroad (abandoned), water, and electric transmission line rights-of way. The top of the pipeline will be a minimum of 36 inches below finished grade to protect against frost action. The pipeline will include an open air cascading-step aeration structure near Windsor, Virginia, which will aerate pipeline water to achieve appropriate dissolved oxygen (DO) concentrations before the water discharges to Lake Prince.

In addition to the walleye spawning facility described above, Virginia Beach has agreed to undertake measures to mitigate environmental impacts arising from construction and operation of the entire water supply project. Virginia Beach has purchased rights to approximately 10,200 acre-feet of storage in Kerr Reservoir (a storage reservoir operated by the U.S. Army Corps of Engineers and located upstream from Lake Gaston) to supplement water flows during periods of drought and to mitigate project impacts on striped bass during spawning periods. Also, pursuant to the dredge and fill permit issued by the Corps of Engineer (discussed below), Virginia Beach will create 11.67 acres of wetlands to mitigate any disturbance or destruction of wetlands associated with pipeline construction.

Virginia Beach's proposal has undergone rigorous environmental scrutiny and analysis, both by our Commission

and by other federal agencies in related proceedings. On July 23, 1993, the Commission's staff issued a draft Environmental Assessment (DEA). On June 23, 1994, the staff issued a final Environmental Assessment (FEA, which recommended preparation of an Environmental Impact Statement (EIS). On August ll, 1994, the Commission issued an order confirming preparation of an EIS.[6]

On-site scoping meetings for the EIS were held in July 1994.[7] The draft EIS (DEIS) was issued on January 27, 1995, and the final EIS (FEIS) was issued on July 7, 1995. The FEIS and its conclusions are summarized in the next section of this order.

In a related proceeding, on May 19, 1994, the Secretary of Commerce issued his Decision and Findings in the Consistency Appeal of the Virginia Electric and Power Company from an Objection by the North Carolina Department of Environment, Health and Natural Resources. The Secretary determined, among other things, that the Virginia Beach water supply project is consistent with the objectives and purposes of the Coastal Zone

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[6] 68 FERC ¶ 61,227. Pursuant to the Commission's long esta blished practice (see, e.g., Pennsylvania Electric Co., 44 FERC ¶ 61,298 (1988)), Virginia Power filed an application for approval of a non-project use of project lands and waters. However, as we have noted (id. at p. 62,075 n.l), because Virginia Beach's proposal entails a substantial new use of project waters, in this case authorization of the non-project use also requires amendment of the license.

[7] On December 22, 1994, the U.S. Court of Appeals for the Fourth Circuit issued an opinion denying a petition filed by Virginia Beach for a writ of mandamus, seeking in effect to omit the preparation of an EIS. 42 F.3d 881.

Management Act (CZMA).[8] In reaching this conclusion, the Secretary determined that: (1) the project will foster development of the coastal zone and coastal zone resources, thus furthering objectives and purposes of the CZMA; (2) the project's individual and cumulative adverse effects on the Coastal Zone are outweighed by its contribution to the national interest; (3) the project will not violate the Clean Water Act or the Clean Air Act; and (4) there are no reasonable alternatives available which would permit the project to be conducted in a manner consistent with the State of North Carolina's coastal management program.

North Carolina filed a petition for review of the Secretary's CZMA decision in the U.S. District Court for the District of Columbia. The court appointed a mediator to facilitate a settlement between North Carolina and Virginia Beach. As discussed below, those efforts resulted in a settlement between those two parties but the settlement did not become effective. The CZMA litigation is currently pending before that court.

In another related proceeding, the Corps of Engineers issued a dredge and fill permit to Virginia Beach, under Section 10 of the Rivers and Harbors Act of 1899[9] and Section 404 of the Clean Water Act,[10] to construct the proposed water intake at Lake Gaston and the proposed water pipeline to the vicinity of

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[8] Pursuant to Section 307 of the Coastal Zone Management Act 16 U.S.C. § 1456(c)(3)(A), a finding of inconsistency would have precluded the Commission from allowing Project No. 2009 lands and waters to be used for the water supply project.

[9] 33 U.S.C. § 403.

[10] 33 U.S.C. § 1344.

Virginia Beach.[11] The sufficiency of the Corps' environmental analysis associated with the issuance of that permit was approved on court review.[12]

On April 28, 1995, the Commission's staff sent a letter to the State Historic Preservation Officer (SHPO) in the Virginia Department of Historic Resources, concluding that there are no historic properties within the area of potential effect, which was defined to be the lands within the project boundary that would be affected by the proposed construction.[13] On May 1, 1995, the Virginia Department responded with a letter concurring in the determination that the proposed activity will have no effect on historic properties, and stating that the requirements of Section

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[11] The Corps may issue a permit under Section 404 of the CWA only if the activity to be permitted has received water quality certification (or waiver thereof) under Section 401(a)(1) of the CWA, 33 U.S.C. § 1341. The Corps' permit, issued on January 9, 1984, was predicated on a water quality certification issued by the Virginia Water Control Board to Virginia Beach on September 12, 1983. Virginia Beach made minor modifications to its proposal in 1988, which were approved by the Corps on December 17, 1992 (see Section 2.4.1 of the FEIS). The water quality certification is subject to 12 conditions (see the FEIS at page 2-37).

[12] See North Carolina v. Hudson, 665 F. Supp. 428 (E.D.N.C. 1987); North Carolina v. Hudson, 731 F. Supp. 1261 (E.D.N.C. 1990); Roanoke River Basin Association v. Hudson, 940 F.2d 58 (4th Cir. 1991); and North Carolina v. Virginia Beach, 951 F.2d 596 (4th Cir. 1991).

[13] Letter from J. Mark Robinson, Director, Division of Project Compliance and Administration, to Alexander Wise, Jr., State Historic Preservation Officer, Department of Historic Resources, Richmond, Virginia.

106 of the National Historic Preservation Act of 1966, as amended, have been met.[14]

On April 26, 1995, the Commission issued notice of a public conference to afford the parties an opportunity to bring to the Commission's attention any information that they believed to be pertinent to the procedural schedule for the issuance of the FEIS and the order on the application. The notice referred to indications that settlement discussions were in progress. On May 1, 1995, counsel for North Carolina filed a copy of a settlement between the State of North Carolina and the City of Virginia Beach. On May 3, 1995, the Commission held a public conference to discuss future schedules and procedures, at which time counsel for the applicant and the principal parties in the proceeding discussed their understanding of the settlement.[15]

On May 12, 1995, Virginia Power filed an amendment to its application, to which was attached a copy of the settlement. On May 16, 1995, the Commission issued a notice of the amendment, inviting all interested persons to file comments and reply comments.

On June 28, 1995, Virginia Beach filed with the Commission an amended settlement agreement between itself and North Carolina. By separate letters dated July 6, 1995, North

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[14] Letter from David H. Burton, Director, Division of Project Review, Department of Historic Resources, to J. Mark Robinson.

[15] The participants in the conference included the mediator, counsel for Virginia Power, North Carolina, Virginia Beach, Weldon, and the Roanoke River Basin Association, Congressman L. H. Payne of Virginia, and a Congressional staff person speaking on behalf of Senators John Warner and Charles Robb of Virginia.

Carolina and Virginia Beach notified the Commission that the settlement (with or without the amendment thereto) did not take effect because the conditions precedent to the settlement did not occur, and therefore there was no agreement between those two parties. On July 7, the Commission issued the FEIS.[16] Thereafter, several parties filed procedural motions and responses that are discussed below.

Virginia Power's amendment to the application states that it is to be deemed withdrawn in the event of notice to the Commission that the settlement "failed to become effective in accordance with its terms."[17] Such notice having been filed with the Commission, we deem the May 12 amendment withdrawn.

This order, and the authorization and license amendment contained herein, are based entirely on the record now before us as that record was compiled at the Commission. This order incorporates as appropriate various mitigation measures voluntarily proposed by Virginia Power in its application, including measures (discussed below) to fully protect the interests of North Carolina, but the order is not premised on any agreements, offers or representations (either express or implied) that occurred as a part of the settlement process.

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[16] The Commission delayed issuing the FEIS prior to that date at the joint request of North Carolina and Virginia Beach, who stated that premature issuance of the FEIS might disrupt the sequence of conditions precedent to their settlement's becoming effective. See the joint letter of June 29, 1995, from counsel for North Carolina and Virginia Beach to the Commission's Secretary.

[17] May 12, 1995 amendment to application at 3, n.1.

II. THE FEIS

The FEIS notes that Virginia Beach is the largest city in Virginia, with nearly 400,000 residents; that it has no potable water supply of its own and purchases all of its water from the adjacent city of Norfolk; and that several droughts over the past 15 years have caused severe water shortages throughout the area. In response, Virginia Beach has adopted mandatory year-round water restrictions and imposed a moratorium on extensions of its water system. Numerous studies have shown that the five-city area (Virginia Beach, Chesapeake, Norfolk, Portsmouth, and Suffolk) will need at least an additional 60 mgd of water by the year 2030.

The FEIS evaluates the five-city area's need for water by analyzing the supply and demand projections of previous water supply studies using more recent population and per capita water use information, and concludes that the five-city area will need the 60 mgd that would be supplied by the proposed Lake Gaston diversion.[18] The FEIS evaluates other alternatives based on current economics and engineering data, including: (1) groundwater sources, both brackish and fresh; (2) enhancement of fresh and brackish surface water sources; (3) alternative water management options including aquifer storage and recovery, surface reservoir enhancement, conservation, and wastewater recycling; (4) desalination of saline surface and groundwater supplies; and (5) combined use of several sources and management options. The FEIS finds that the two alternatives reasonably available to Virginia Beach are desalination of ocean water; and conjunctive use of several sources including

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[18] The project will withdraw a maximum 60 mgd of initial water in order to provide approximately 54 mgd of finished water. This discrepancy is associated with normally-expected system losses.

wastewater recycling, reservoir enhancement, increased groundwater pumping, and desalination of ocean water. The FEIS then evaluates these to alternatives, a no-action alternative in which Virginia Beach receives no additional supplies, and the Lake Gaston proposal, in terms of their respective impacts to fish and wildlife, wetlands, land use, socieoeconomics, water availability, water quality, and air quality. These environmental resources are evaluated, where applicable, within the following geographic zones: (1) the Lake Gaston area, including adjacent reservoirs and counties; (2) the lower Roanoke River Basin, from the Roanoke Rapids Dam to Albemarle Sound; (3) the upper Roanoke River Basin, from the headwaters in the Blue Ridge Mountains of Virginia to the Kerr Reservoir; (4) the pipeline route and adjacent counties in Southern Virginia; and (5) the terminus environment, including the southside Hampton Roads five-city area.

To determine the environmental impacts of the water withdrawal from Lake Gaston, the FEIS assesses the effects of the withdrawal on river flow, and concludes that the impacts from the water supply project will not adversely affect water availability in the reservoir area, the upper basin, or the lower basin. The water supply project will, however, temporarily affect 19.5 acres of wetlands, and permanently affect 0.7 acres of wetlands, both along the 76-mile pipeline corridor outside the project boundary). In addition, the water supply project will result in the conversion of 10.22 acres of forested wetland to emergent wetlands along Ennis Pond Channel in the terminus area. The withdrawal of 60 mgd of water from Lake Gaston will reduce hydroelectric generation at the Gaston and Roanoke Rapids Project by 7,930 megawatt hours annually, or approximately 1.1 percent of total annual generation. Replacing this lost energy with generation from coal-fired power plants will result in the release of pollutants into the air.

The FEIS concludes that the proposed water supply project will ensure a safe, reliable, and relatively inexpensive source of potable water for Virginia Beach and secondary users now and in the future, and that it is the best source for meeting Virginia Beach's and other municipalities' potable water needs. The project will have similar minor environmental effects as the other alternatives but at 32 percent of the cost of the equally reliable desalination alternative and at 58 percent of the cost of the less reliable conjunctive use alternative.

The FEIS recommends the following measures as mitigation for the proposed water supply project: (1) the provision of 1/3 acre walleye spawning area in Pea Hill Cove (within the project boundary); (2) the use of Virginia Beach's 10,200 acre feet of storage in Kerr Reservoir to mitigate for project impacts on reservoir releases on behalf of striped bass; (3) the creation of 11.67 acres of wetlands mitigation pursuant to the Corps' Section 404 dredge and fill permit conditions; and (4) a requirement that if any unidentified archeological or historical resources are found during construction, all land-disturbing activities must cease, and the Virginia State Historic Preservation Office must be consulted.

The FEIS contains a separate chapter analyzing the pertinent portions of the May 12, 1995 amendment to the application. The FEIS concludes that the proposed project would be beneficial and not deleterious to the environment, in the manner and for the reasons summarized above, either with or without the pertinent changes effectuated by the amendment to the application as those pertinent changes are discussed in the FEIS.

III. PENDING MOTIONS

During the course of the proceeding, and particularly during the pendency of the CZMA proceeding before the Secretary of Commerce, certain parties filed motions (and answers thereto) variously urging us either to delay or accelerate processing of the instant application. Those motions have been rendered moot by the issuance of this order.

One such motion for stay, however, requires consideration here, in that it raises an issue of compliance with the Clean Water Act (CWA). Section 401(a)(1) of the CWA[19] requires an applicant for a federal license or permit to conduct any activity which may result in any discharge into navigable waters to obtain from the state in which the discharge originates certification that any such discharge will comply with applicable water quality standards. As noted above, The Virginia Water Control Board issued water quality certification for the Lake Gaston water supply project on September 12, 1983; the Corps relied on that certification in issuing Virginia Beach a dredge and fill permit under Section 404 of the CWA; and the dredge and fill permit was sustained on court review.

On May 31, 1994, the State of North Carolina filed a motion for a stay of the proceeding based, inter alia, on a contention that the Commission cannot amend Virginia Power's license unless and until Virginia Power obtains water quality certification (or waiver thereof) from North Carolina. It argues that, while the place of discharge for purposes of the dredge and fill permit is in Virginia (the location of the land disturbance that gives rise to the need for that permit), the water supply project will also affect the water quality in the hydropower project's

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[19] 33 U.S.C. § 1341(a) (1).

discharge, which is from a dam located in North Carolina. The Roanoke River Basin Association and the Town of Weldon, North Carolina, filed an answer in support of the motion,[20] while Virginia Power and Virginia Beach filed answers opposing the motion.[21]

We need not reach most of the numerous alternative arguments advanced in the pleadings on this issue. Section 401(a)(1) of the CWA provides, in pertinent part, that "[a]ny applicant for a Federal license or permit to conduct any activity including . . . the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate. However, even assuming, arguendo, that the proposed amendment to the Project No. 2009 license to accommodate the construction and operation of Virginia Beach's water supply project is subject to the provisions of Section 401(a)(1), the amendment does not trigger the requirement for certification under that section. Section 4.38(f)(7)(iii) of the Commission's regulations[22] provides in pertinent part:

> [A]ny application to amend an existing license . . . requires a new request for water quality certification . . .

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[20] The Roanoke River Basin Association and the Town of Weldon reiterated their position in comments filed on the DEIS on March 13, 1995 (comments at 14-15), and in the Roanoke Ri ver Association's [sic] July 13, 1995 response (at 2-5) to North Carolina's July 10, 1995 motion.

[21] In its motion of July 10, 1995, discussed below, North Carolina reiterated its position with respect to the water quality certification issue. See motion at 24-26.

[22] 18 C.F.R. § 4.38(f)(7)(iii).

if the amendment would have a material adverse impact on the water quality in the discharge from the project . . .

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The impact of an approximately one percent reduction in flow releases into the Roanoke River from the project dam is exhaustively analyzed in the FEIS, as summarized above and discussed below. We conclude, based on that analysis, that the amendment to the license will not have a material adverse impact on the water quality in the discharge from the project. Accordingly, the license can be amended without water quality certification (or waiver thereof) from North Carolina. The analysis and conclusions of the FEIS that the project will not significantly affect water quality concur with the findings in the Corps' Final Supplemental Environmental Assessment.

As noted above, on July 10, 1995, North Carolina filed a procedural motion in which it reiterated its request for an evidentiary hearing with cross examination of witnesses under oath before an administrative law judge.[23] The Commission, however, has ample authority to make its determinations herein on the basis of data and other evidence submitted and evaluated

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[23] The Roanoke River Basin Association filed, on July 13, 1995, a response in support of North Carolina's motion, and Virginia Beach filed, on July 17, a response in opposition to the motion North Carolina and the Roanoke River Basin Association question the validity of the data used to estimate population growth and water use. The FEIS presents a full explanation of how the population projections and per capita water use estimates were derived (see page 1-12). Wherever possible the staff made use of the most recent documented information available, and was deliberately conservative in its estimates. We have reviewed the information filed by North Carolina and the Roanoke River Basin Association and confirm that the values in the FEIS are both valid and current. No re-calculation or adjustment of these figures is warranted.

in written form without cross examination of live witnesses.[24] The facts relevant to resolution of this proceeding are technical and scientific in nature. These facts can be properly and adequately evaluated on the basis of written submissions and responsive written submissions. North Carolina does not allege any issues concerning the motives, credibility or intent of relevant witnesses, nor has it demonstrated any other useful purpose that would be served by providing an opportunity to examine and cross examine the scientists, economists, and other professional experts as they offer data and analysis into evidence.

This proceeding has now been actively pending before the Commission for more than four years. During that period, North Carolina has had ample and repeated opportunity to present its data and views, and to analyze the data and views presented by the other parties as well as the data and views advanced by the Commission's staff in its draft environmental documents. Indeed, North Carolina has been a very active participant in this and related proceedings, and has amply availed itself of every opportunity to submit and comment on data and other evidence. North Carolina, in its motion, has not identified any witness it would proffer or cross examine at a live hearing, nor has it made any other showing of what it would hope to accomplish at such a hearing that has not already been accomplished through its written submissions. Indeed, as we read the motion, North Carolina's real concern is not the procedures by which the data is elicited and evaluated but the data and analysis itself, and the conclusions derived therefrom. The record before us is exhaustive. We do not perceive any useful purpose to be served by setting this case down for a hearing before an administrative

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[24] See, e.g., Environmental Action v. FERC, 996 F.2d 401, 413 (D.C. Cir. 1993); Louisiana Ass'n of Independent Producers and Royalty Owners v. FERC, 958 F.2d 1101, 1113-15 (D.C. Cir. 1992).

law judge, nor any justification for the delay such a procedure would entail. Accordingly, we deny the motion for an evidentiary hearing before an administrative law judge.

On July 14, 1995, North Carolina and the Roanoke River Basin Association filed a joint motion that reiterates, again, their position with respect to Section 401 of the Clean Water Act. The motion requests that the Commission condition any order approving the project on the issuance by North Carolina of a water quality certification or waiver. North Carolina states that it will seek rehearing and court review of any such order, and further requests that the Commission stay the effectiveness of any such order pending rehearing and court review.

Having now determined that water quality certification by North Carolina is not required, we deny the request for the condition. In acting on stay requests, the Commission applies the standard set forth in the Administrative Procedure Act, 5 U.S.C. § 705, i.e., the stay will be granted if the Commission finds that "justice so requires."[25] Under this standard, the Commission considers a number of factors related to the public interest, such as whether the movant will suffer irreparable injury in the absence of a stay.

The gravamen of North Carolina's and the Association's position throughout this proceeding is that the injury that the water supply project would cause them is a shortage of water in the Roanoke River. No such irreparable injury is alleged in the motion for a stay, however, nor could it be, because no water will be withdrawn from the river until after the lengthy process of constructing the water pipeline has been completed. The only irreparable injury alleged by the movant is that trees will be cut

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[25] See, e.g., Clifton Power Co., 58 FERC ¶ 61,094 (1992).

and wetlands disturbed along the right-of-way of the water pipeline. That right-of-way lies entirely in Virginia; the FEIS has determined that those impacts will be minor; and (as noted above) the courts have upheld the comparable environmental determinations of the U.S. Army Corps of Engineers with respect to that pipeline and its right-of-way. The movants have not made a showing adequate to convince us that justice requires grant of a stay. Accordingly, the motion for a stay is denied.

On July 20, 1995, the U.S. District Court for the District of Columbia issued an order staying the effectiveness of the Secretary of Commerce's Decision and Findings in the CZMA proceeding. On July 21, North Carolina filed a letter contending that the Commission cannot issue this order absent a lifting of that stay because the Secretary's determination is a prerequisite to amendment of the license. On July 24, Virginia Beach filed an answer to North Carolina's letter.

The CZMA proceeding is separate and apart from the Commission's proceeding herein, which is grounded in the Commission's responsibilities under the FPA. The record before the Commission is now complete, and the Commission has made representations to several federal courts in related litigation that it will act on that record as expeditiously as possible in the case pending before it. See, e.g., In Re City of Virginia Beach, 42 F.3d 881, 886 (4th Cir. 1994) ("[W]ith FERC's continuing assurance of expedited treatment and its promise to adhere to a tight schedule, we cannot conclude that the delays have been so egregious as to meet the demanding standards required for us to interfere with the agency process through a writ of mandamus."). The Secretary of Commerce has made the requisite CZMA Determination, and it has not been reversed or remanded. That Determination, although its effectiveness has been stayed,

continues to be the operative ruling on the merits of the CZMA proceeding.

Given the current posture of the case, we believe that the most appropriate resolution is to issue this order and to condition the effectiveness of the license amendment and authorization contained herein on the filing by Virginia Beach of proof that the court has lifted its July 20 stay, or until further order of the Commission.[26] This will enable us to faithfully implement the Commission's repeated court representations that we would issue our order on the merits as soon as the record before this Commission is complete, while at the same time according full deference and respect to the court's order of July 20, 1995.

IV. DISCUSSION

Comments on the DEIS and the licensee's amendment to its application were received from elected officials, federal and state agencies, local and regional governments, conservation organizations, private industries, and local residents. Some commenters registered their support for Virginia Beach's proposed use of project waters, requesting expeditious Commission approval. However, many comments were in opposition to the water supply project, asserting perceived deficiencies in the staff's analyses or expressing general opposition to the concept of interbasin water transfers. We discuss below the concerns of the parties who either oppose the water supply project or assert that the DEIS is deficient in some respect.

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[26] See Iroquois Gas Transmission System, L.P., et al., 53 FERC ¶ 61,194 at p. 61,795, ordering paragraph no. 48 (1990).

1. Project Need

The Environmental Protection Agency (EPA), North Carolina, the Sierra Club, the Roanoke River Basin Association, and the Town of Weldon, suggested that the need for the water supply project would be obviated by increased water conservation, development of other local water sources, use of emergency wells, regional water sharing, reduced military employment as a result of the Base Realignment and Closure Act (BRAC), and slower than projected population growth.

In order to assess project need, the Commission staff developed its own water supply and demand projections.[27] These projections assumed continued aggressive water conservation efforts and regional water sharing, and reflected the most recent population growth trends, recent increases in safe yields by several municipalities, and the 1995 BRAC recommendations. The 1995 BRAC recommendations did not in any event affect military bases in south side Hampton Roads, and the consumptive use projections in the FEIS took into account the previous BRAC recommendations. The FEIS concluded that by the year 2030 the five-city area will need the 54 mgd of water that will be provided by the project. We agree with that conclusion for the reasons stated in the FEIS.

2. Downstream Water Quality

The EPA, North Carolina, Sierra Club, and Roanoke River Basin Association raised concerns regarding the water supply project's potential impacts on water quality, especially dissolved oxygen (DO), in the lower Roanoke River. Specifically these parties expressed concern over "depressed DO events" and

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[27] See Section 1.3 of the FEIS.

limits on future economic growth by further reduction of the lower Roanoke River's waste assimilative capacity.

The FEIS evaluated water quality information from various sources. Based on this evaluation, the FEIS determined that the RTI model[28] and documented water quality data were adequate to draw sound conclusions regarding the proposed project's potential impacts on assimilative capacity. Other available information (such as the North Carolina Division of Environmental Management (NCDEM) model) was evaluated and found to be either unreliable or not specific to the area of potential impact.[29] The RTI model indicated that, depending on other physical conditions, the effect of the 60 mgd withdrawal on DO levels in the lower Roanoke River would be either negligible or nonexistent.

The FEIS also included a statistical assessment of documented water quality data (primarily NCDEM-generated) to determine correlation and sensitivity of DO levels to these variables. These findings support the conclusion that DO levels are not sensitive to low flow conditions, but are very sensitive to temperature changes. The staff's analysis of water quality data collected between 1988 and 1993 indicates that previous low DO events occurred under relatively high water temperatures and generally during high flow events. The withdrawal of 60 mgd will not measurably affect water temperatures in the Roanoke

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[28] The RTI model refers to the Research Triangle Institute's wasteloa d model for the lower Roanoke River, RTI Project No. 434N33228-2, November 1986.

[29] See Sections 3.3.3 and 4.1.3.2 of the FEIS.

River. Additionally, there is no statistical support for the claim that the existing assimilative capacity will be compromised.[30]

In summary, the above analyses support the conclusion that the project will have no measurable impact on water quality in the lower Roanoke River. We agree with that conclusion, for the reasons stated above and in the FEIS.

3. Fisheries Resources

The Department of the Interior, NMFS, EPA, and North Carolina raised concerns regarding the potential effects of the proposed water supply project on fishery resources in the Roanoke River. Of primary concern are potential impacts to striped bass and shortnose sturgeon.

Concerns for Roanoke River striped bass have largely focused on the need to manage flows to enhance reproductive success. At issue is the potential impact of water withdrawals on the ability to successfully manage flows for striped bass.

Striped bass spawning in the lower Roanoke River typically occurs near Roanoke Rapids (immediately downstream from the project's Roanoke Rapids development). Fertilized striped bass eggs are semi-buoyant and develop into larvae in a few days while drifting downstream. After several more days the larvae begin feeding. It is important that the initiation of feeding correspond with the arrival of larval striped bass in the estuary where prey resources are highest. For this reason larval transport timing is likely a critical component of reproductive success.

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[30] See Section 4.1.3.2 of the FEIS.

Current flow management for striped bass in the lower Roanoke River (downstream of the proposed project) was implemented by North Carolina in cooperation with the Corps of Engineers and Virginia Power. This action was taken in response to the declining striped bass population trend. Flow management consists of releasing flows during the spawning period (April May, and June) that fall within a specified range of maximum and minimum flows. The water supply project will not affect the frequency of days meeting these criteria.[31] Regarding larval transport timing, average flows during the striped bass spawning period will decrease, resulting in an increase in the transport time for larval striped bass of less than four hours. However, the natural effects of winds and tides often vary transport rates by as much as a full day. Any potential delay associated with the withdrawal will be subsumed in the natural variability in river flow. Therefore, the project will not affect mortality rates associated with larval striped bass transport time.[32] In summary, the project will not affect the reproductive success of striped bass in the Roanoke River.

NMFS, EPA, Interior, and North Carolina suggest that a flow regime which resembles the pre-impoundment flows (the flows that occurred before the project dams were built) would best serve the aquatic resources of the Roanoke River. The Roanoke Water Flow Committee (RRWFC), an advisory committee comprising representatives from federal, state, and private organizations, developed a 365-day flow regime based on pre-impoundment flows that recommends minimum and

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[31] See Section 4.1.3.1 of the FEIS.

[32] Id.

maximum flows for the lower Roanoke River.[33] North Carolina asserts that the agencies will recommend a pre-impoundment flow regime during relicensing and that the 60 mgd withdrawal will significantly reduce the amount water available to achieve these flows.

The FEIS evaluated whether the water withdrawal would limit the feasibility of implementing a pre-impoundment flow regime. The withdrawal equates to approximately 1.7 percent of the water needed to meet the RRWFC's proposed minimum annual flows. HEC-5 analysis (a computer-based flow model developed by the Corps of Engineers) indicates that, even without the withdrawal, flows would fail to meet RRWFC's recommended 365-day flows approximately 50 percent of the time. Furthermore, the withdrawal will not increase the number of years failing to meet the RRWFC's recommended flows. Therefore, the water supply project will not significantly affect the feasibility of adopting pre-impoundment flow regime, if that should be found necessary in some future proceeding.

Both Interior and NMFS state that shortnose sturgeon, an endangered species, may occur in North Carolina watersheds such as the Roanoke River. There is no recorded evidence of any shortnose sturgeon being collected in the Roanoke River. The nearest reported collection was from the Chowan River in 1881. Other, more recent, anecdotal references to the appearance of

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[33] The RRWFC has recommended, and the Corps of Engineers and Virginia Power have adopted, a 76-day period during the striped bass spawning period during which mitigation flows are released to enhance spawning conditions. The RRWFC subsequently proposed extending the existing flow mitigation period to a 91-day flow regime. The Corps has not adopted the proposed 91-day regime, but Virginia Power is currently complying with the 91-day proposal on a voluntary basis.

shortnose sturgeon in other bodies of water in North Carolina do not constitute evidence of the existence of shortnose sturgeon in the Roanoke River.

But even assuming, arguendo, that there were any shortnose sturgeon in the Roanoke River, the proposed project would not have any impact on them. The only important shortnose sturgeon habitat characteristics that the project will affect are river depth and velocity. Shortnose sturgeon prefer deep water (15 to 40 feet) with river velocities between 30 and 76 centimeters per second (cm/s) for juvenile and spawning adults. Our analysis indicates that the flow reductions associated with the proposed withdrawal would decrease mean river velocities by less than one cm/s and decrease depth by less than three inches. We conclude that the minor changes in velocity and depth associated with the proposed project will not significantly affect shortnose sturgeon habitat in the lower Roanoke River.[34]

4. Consumptive Use Estimates

The FEIS developed consumptive use estimates for the entire Roanoke River Basin to project future demand for water within the basin.[35] Virginia Beach, EPA, North Carolina, the Sierra Club, Interior, and the Roanoke River Basin Association questioned the accuracy of the staff's estimates. Virginia Beach contended that the estimates are too high, while the others questioned whether the staff's projections are high enough to

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[34] This determination was expressed to NMFS in a letter of May 22, 1995, from J. Mark Robinson, Director, Division of Project Compliance and Administration, to Rolland A. Schmitten, Assistant Administrator for Fisheries, NMFS.

[35] See Section 4.1.1.1 of the FEIS.

account for increases in consumptive water demand generated by reasonably foreseeable economic development in the Roanoke River Basin. Some parties questioned whether certain proposed future consumptive uses had been included in the staffs projections.

In deriving its consumptive demand projections for the Roanoke River Basin, the Commission staff reviewed the projections developed by North Carolina and Virginia Beach through 2010,[36] and independently projected consumptive use to 2030 using long-term population and employment forecasts. The FEIS also verified that known economic development proposals with large consumptive use demands had been included in the modeling analysis. The FEIS concludes that the consumptive use projections are accurate and address proposed future consumptive uses. We agree with the conclusions and analysis in the FEIS for the reasons stated therein.

5. Socioeconomics

EPA, North Carolina, the Roanoke River Basin Association, and the Town of Weldon raised concerns that the permanent removal of 60 mgd from the Roanoke River Basin would constrain future downstream economic development by making less water available
for consumptive use by business and industry, and by reducing the assimilative capacity available to businesses needing to discharge effluent to the river.

The FEIS modeled the combined effects of the proposed withdrawal and other existing and future consumptive water demand within the basin. This information was used to estimate

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[36] See Section 4.1.1 of the FEIS.

potential changes in the Roanoke River's flow and assimilative capacity. The analysis showed that sufficient water would be available to meet the consumptive water demands of both Virginia Beach's proposed withdrawal from Lake Gaston and projected economic development through 2030.[37] The FEIS also determined that the Roanoke River's assimilative capacity will not be reduced and that upstream consumptive users and wastewater dischargers will not be affected.[38] As a result, there will be no long-term reduction in employment and income within Roanoke River Basin attributable to Virginia Beach's water supply project.[39]

6. Reservoir Storage

The amended application calls for use of storage in Kerr Reservoir, located upstream of Lake Gaston, to replace water withdrawn via Virginia Beach's pipeline on a gallon-for-gallon basis when flows downstream of Roanoke Rapids Dam are below the Roanoke River Water Flow Committee (RRWFC) striped bass target flows. The Roanoke River Basin Association is concerned that Kerr Reservoir storage may not be sufficient to meet this requirement.

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[37] Id.

[38] See Sections 4.1.3.5 and 4.1.4.3 of the FEIS.

[39] Commission staff also evaluated the potential impacts of the project on low-income and minority residents in the lower Roanoke River Basin and the southside Hampton Roads area (including Virginia Beach), and concluded that such residents will not be disproportionately affected. See Section 4.1.7.1 of the FEIS.

In 1971, the Corps, Virginia Power, and the North Carolina Wildlife Resources Commission entered into a memorandum of understanding for the release of target flows to enhance striped bass spawning conditions. In 1988, the RRWFC revised these target flows to encompass 76 days during the spawning period. In 1989, the 1971 memorandum of understanding was revised to incorporate these 76-day target flows. This revised memorandum of understanding remained in effect from 1989 through the 1993 spawning season. The Corps, however, has informally agreed to extend the 76-day target flows through the year 2000. As discussed above, the RRWFC subsequently recommended extending the 76-day period of target flows to a 91-day period. The Corps has not adopted this recommendation, but Virginia Power voluntarily complies with the 91-day target flow period to the extent possible.

The FEIS thoroughly analyzed the impact of the water supply project on meeting striped bass target flows.[40] Staff modelled flows to determine the number of days during the 76- and 91-day flow regimes that Virginia Beach would be able to release 93 cfs from its storage in Kerr Reservoir to offset its withdrawals from Lake Gaston. The FEIS determined that Virginia Beach's storage would be sufficient to completely replace pipeline withdrawals every day of the 76-day flow regime (for modeled years 1966 to 1969, 1971, and 1981). Similarly, Virginia Beach would be able to use its stored water to replace withdrawals on a gallon-for-gallon basis for every day of the proposed 91-day flow regime except for modeled year 1981 (the drought of record), when mitigation storage could supply 93 cfs on only 86 of the 91 days. We agree with the conclusions and analysis in the FEIS for the reasons stated therein.

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[40] See Section 4.1.3.1 and Appendix D of the FEIS.

7. Incremental Withdrawal

Interior and EPA recommend that the Commission approve an interim withdrawal allocation to provide water necessary to meet Virginia Beach's immediate and short-term demand only (six to ten years). Then, after some unspecified period, a permanent rate of withdrawal could be approved. Interior and EPA prefer this alternative to approval of the full withdrawal request, because it would allow the Commission to gather more information before it acts on the full request.

Approval of only an interim withdrawal would introduce a significant level of uncertainty regarding a future water supply for Virginia Beach. We conclude that the 60 mgd withdrawal will have no significant impacts. Therefore, an incremental withdrawal is unwarranted. Furthermore, the relative cost of Lake Gaston water would serve as an incentive to minimize withdrawals and to use other, cheaper sources to the extent possible. We find no evidence in the 15-year record of intensive analysis associated with Virginia Beach's project to justify a delay of the permanent decision, and our own analysis identified no significant impacts associated with the project. Therefore, we will not adopt the recommendation of EPA and Interior.

8. Conditions

Citing Section 10(j) of the FPA, the U.S. Fish and Wildlife Service (FWS) recommended including a series of special articles in any order approving Virginia Beach's nonproject use of project lands and waters and amending Virginia Power's license accordingly. However, Section 10(j) does not apply in this proceeding, because the amendment is not a "licensing action" subject to those parts of the FPA, such as

Section 10(j), that apply at licensing.[41] Accordingly, we reviewed FWS' recommendations under the comprehensive development standard of Section 10(a)(1) of the FPA. We agree with these conditions and include them in the license amendment issued herein, modified as appropriate. See new Articles 44, 46 and 47 of the license, as adopted in ordering paragraph (C) of this order.

Virginia Power's application and our authorization herein in response to that application, are specifically predicated on the need for water in Virginia Beach and its immediately surrounding area. Accordingly (with the exception of emergency water deliveries to communities along the route of the water pipeline), our authorization is commensurately limited to that stated purpose, and does not include authority to transfer or sell water from Lake Gaston outside of that designated region.

V. NORTH CAROLINA WILL BE FULLY PROTECTED

The FEIS's analyses and conclusions are very protective of North Carolina's interests. The FEIS used very conservative assumptions in its analyses of future consumptive use, water quality impacts, and flow and lake level reductions, to ensure that there will be no significant impacts to North Carolina.

The Commission's approval of the water withdrawal project will directly benefit North Carolina through the use of the 10,200 acre feet of storage in Kerr Reservoir purchased by Virginia Beach for use as mitigation. New Article 45 of the

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[41] A "licensing amendment" is one that authorizes a significant new project work, such as a new turbine/generator, an increase in the height of the project dam, or the like. See, e.g., Adirondack Hydro Development Corp., 50 FERC ¶ 61,100 (1990) at pp. 61,318-19.

license, as adopted by ordering paragraph (C) of this order, requires Virginia Power to develop a plan, in consultation with the Corps of Engineers and Virginia Beach, to optimize use of this mitigation storage for downstream enhancement. Because of this additional mitigation storage it will be possible to provide for more days meeting the 76- and 91-day flow regimes than without the proposed project. Based on the FEIS's HEC-5 analysis, even under the worst drought conditions on record, there will be sufficient storage available from the 10,200 acre feet to augment flows during the 76-day striped bass spawning period. During all but the most severe droughts there will be water available from the mitigation storage to augment flows during the 91-day spawning period.

By letter dated July 6, 1995, Virginia Beach has agreed to voluntarily implement a number of additional environmental enhancements. As required in any event by the terms of this order, Virginia Beach will cap withdrawals at 60 mgd. Virginia Beach will not resell the water to any communities outside of southeastern Virginia (except for emergency deliveries to communities along the route of the pipeline). Virginia Beach has pledged to work with North Carolina to develop a Drought Index that will restrict water withdrawals in low flow conditions. Virginia Beach pledges to maintain "an active and ongoing conservation program," and to "encourage regional conservation programs." Virginia Beach will help finance a hydrilla control program in the Roanoke Basin, and has promised to refrain from taking any measures that might interfere with the recreational use of Lake Gaston.[42]

While almost all of these matters fall beyond the scope of the Commission's jurisdiction, we will closely monitor future

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[42] July 6, 1995 letter at 4-6.

developments in the region. We fully expect Virginia Beach to be true to its word, and we will not hesitate to take whatever action may be appropriate in the event that Virginia Beach fails to follow through on its promises.

VI. CONCLUSION

We have carefully considered all of the evidence in the record before us. We appreciate the efforts of all of the parties in assisting us in compiling such a complete record, and we understand and respect the importance of this case to all concerned. For the reasons discussed above and in the FEIS, we conclude that granting the application for a nonproject use of lands and waters of Project No. 2009, and amendment of the Project No. 2009 license as proposed in order to accommodate that nonproject use, is best adapted to a comprehensive plan for improving or developing the waterway for beneficial public purposes. Virginia Beach will be relieved of the serious water supply problems that have severely constrained the life style of its citizens and clouded its economic future. At the same time, we believe that the conditions to the license will fully protect the vital interests of the people of the Lake Gaston area and the people of North Carolina who are dependent on the continued vitality of the Roanoke River for both economic and recreational uses.

The Commission orders:

(A) For the reasons discussed above, all motions currently pending before the Commission in this proceeding, including the motions filed by North Carolina and the Roanoke River Basin Association on July 10 and 14, 1995, are denied.

(B) The application to authorize the City of Virginia Beach, Virginia, to withdraw up to 60 million gallons per day of water from the Project No. 2009 Lake Gaston reservoir for municipal consumption, and to construct, operate, and maintain within the Project No. 2009 boundary certain facilities for that purpose, as described above, is approved. This authorization is predicated on the need for water in Virginia Beach and its immediate vicinity and (except for emergency deliveries of water to communities along the route of the water pipeline) does not authorize the transfer or sale of water outside of that designated region of Virginia.

(C) The license for Project No. 2009 is amended to include the following new license articles:

Article 43. If, during the course of construction, previously unidentified archeological or historical properties within the project boundary are discovered, the licensee shall ensure the cessation of all land-clearing or land-disturbing activity in the vicinity of the project and consult with the State Historic Preservation Officer (SHPO) to determine the need for additional cultural resource management measures. If needed, the licensee shall ensure the preparation of a cultural resource management plan. The plan shall include, but not be limited to, a description of each discovered property indicating whether it is listed on or eligible for listing on the National Register of Historic Places, a description of the potential effect, the proposed measures for avoiding or mitigating the effects, documentation of consultation with the SHPO, and a schedule for mitigating the impacts. The licensee shall file its plan and evidence of consultation with the SHPO with the Commission for approval. The Commission reserves the right to require changes to the plan based upon the comments. The licensee shall not permit the resumption of land-clearing or land-disturbing activities until

informed by the Commission that the requirements of this paragraph have been fulfilled.

Article 44. At least 90 days prior to the start of operation of the City of Virginia Beach, Virginia's water supply project, the licensee shall file with the Commission, for approval, a plan for post-construction studies to monitor the effectiveness of the walleye spawning facility. The monitoring plan shall include a schedule for: (l) implementation of the plan; (2) consultation with the appropriate federal and state agencies concerning the results of the monitoring; and (3) filing the results, agency comments, and the licensee's response to agency comments with the Commission.

The licensee shall ensure that the plan is prepared after consultation with the United States Fish and Wildlife Service and the Virginia Department of Game and Inland Fisheries. The plan shall include documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall ensure that agencies are allowed a minimum of 30 days to comment and to make recommendations before filing the plan with the Commission. If a recommendation is not adopted, the filing shall include the reasons, based on project-specific information.

If the results of the monitoring indicate that changes in the spawning facility are necessary to protect fish resources, the Commission may direct that the licensee ensure that the facility is modified.

Article 45. At least 90 days prior to the start of the water withdrawal, the licensee shall file with the Commission, for approval, a plan detailing how the 10,200 acre feet of storage volume in Kerr Reservoir is to be used to augment flows in the Roanoke River below the project dams during the striped bass spawning period and during low flow conditions. The plan shall include but not be limited to, the following: (1) a detailed description of conditions under which the 10,200 acre feet in Kerr Reservoir would be released for downstream flow mitigation; (2) procedures that will be implemented to coordinate the storage volume releases among the licensee, the U.S. Army Corps of Engineers (Corps), and the City of Virginia Beach (City); and (3) a schedule for filing annual reports on Kerr Reservoir storage volume releases to the Corps, the City, the Virginia and North Carolina resource agencies and the Commission.

The licensee shall prepare the plan after consultation with the Corps and the City. The licensee shall include with the plan documentation of consultation copies of comments on the completed plan after it has been prepared and provided to the Corps and the City, and specific descriptions of how the Corps' and the City's comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the Corps and the City to comment and to make recommendations before filing the plan with the Commission. The Commission reserves the right to require changes to the plan to ensure that the available storage in Kerr Reservoir is used to enhance flows during the striped bass spawning period and for low flow augmentation.

Article 46. The Commission reserves the right, upon its own motion or upon the recommendation of federal or state fish and wildlife agencies, to require alterations of water withdrawal project intake structures and operations for the purpose of protecting aquatic resources downstream of the Roanoke Rapids

Dam from environmental impacts caused by the withdrawal of water from the Lake Gaston reservoir to supply water to Virginia Beach.

Article 47. In order for the Commission to monitor the City of Virginia Beach's compliance with the maximum withdrawal rate of 60 mgd, the licensee shall monitor pipeline withdrawals. The licensee shall file, within 90 days prior to the initiation of water withdrawals, a plan for monitoring project withdrawals and maintaining records to ensure that withdrawals do not exceed the approved maximum rate of 60 mgd.

(D) This order is final unless a request for rehearing is filed within 30 days from the date of its issuance, as provided in Section 313(a) of the FPA. The filing of a request for rehearing does not operate as a stay of any aspect of this order, except as specifically ordered by the Commission.

(E) The amendment of the license and the authorization contained in this order shall not become effective until Virginia Beach files, with the Secretary of the Commission, proof that the United States District Court for the District of Columbia has lifted the stay of the Determination of the Secretary of Commerce under the Coastal Zone Management Act (which Stay is set forth in the order issued by the court on July 20, 1995, in State of North Carolina v. Ronald H. Brown, Civil Action No. 94-1569) and that the Determination of the Secretary of Commerce has become effective, or until further order of the Commission (whichever first occurs).

By the Commission.

(S E A L)

/s/ Lois D. Cashell
Lois D. Cashell,
Secretary.

APPENDIX H

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: **Elizabeth Anne Moler, Chair;**
Vicky A. Bailey,
James J. Hoecker,
William L. Massey, and
Donald F. Santa, Jr.

Virginia Electric and Power Company) **Project No. 2009-008**

ORDER DENYING REHEARING AND DENYING STAY

(Issued September 22, 1995)

On July 26, 1995, the Commission issued its order approving non-project use of project lands and waters and amending license.[1] The order was based on, and incorporated by reference, the Final Environmental Impact Statement (FEIS), issued on July 7, 1995.

Three parties, the Sierra Club and (jointly) the State of North Carolina and the Roanoke River Basin Association (North Carolina), filed timely requests for rehearing accompanied by

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[1] 72 FERC § 61,075. On August 23, 1995, the Commission's Secretary issued a brief Errata to the order which, among other things, renumbered the five new license articles from 43 through 47 to 44 through 48.

requests for a stay. For the reasons discussed below, we will deny rehearing and deny the stay.

In addition to the requests for rehearing from certain parties in the case, the Commission has also received a number of letters from non-parties, some after the statutory deadline for seeking rehearing, that in one context or another employ the term "rehearing." None of the letters seeks to intervene late in the proceeding. Because only parties have standing to seek rehearing, we will place the letters in the public file associated with this docket but will not specifically address in this order the particular issues they raise. We do, however, welcome and appreciate these letters and have carefully considered the views expressed therein. The Commission recognizes the importance of this proceeding to the many people affected by it, particularly those living in the area of Lake Gaston, and has made a special effort to condition the license in such a manner as to respond to these concerns and to ameliorate any impacts to the greatest extent feasible.

DISCUSSION

A. Sufficiency of the Record and Environmental Analysis

1. The Need for the Water

North Carolina and the Sierra Club contend that the FEIS used inflated values for the population projection and per capita use and ignored other data. They contend that these alleged deficiencies in the FEIS cast doubt on the need for the project.

That there is a need for a reliable water source for Virginia Beach (and the surrounding south side Hampton Roads

area) cannot be disputed. Virginia Beach, which has no water supply of its own, had water use restrictions in place in 1977, rationing from 1980 to 1981, and various water use restriction episodes from 1985 to 1992. Virginia Beach has been under mandatory long-term restrictions on water use, and water system connections, since 1991, and (also since 1991) Virginia Beach's sole supplier, Norfolk, has set severe limits on water deliveries to Virginia Beach. The FEIS contains a detailed chronology and explanation of water use restrictions in the five-city area.[2]

The FEIS confirms abundant prior documentation of the fact that Virginia Beach is currently suffering under a water supply deficit, and that this deficit will only worsen with time. See, for instance, State of North Carolina v. Hudson, 731 F. Supp. 1261, 1266, 1272 (E.D.N.C. 1990), in which the U.S. District Court upheld the findings of the U.S. Army Corps of Engineers, based on "searching analysis" of available information, that Virginia Beach would need the entire 60 million gallons per day (mgd) of water by the year 2030. These findings were specifically affirmed -- in the context of approving the Corps' issuance of the dredge and fill permit for the very project at issue before us today -- by the U.S. Court of Appeals in Roanoke River Basin Ass'n v. Hudson, 940 F.2d 58, 66 (4th Cir. 1991) (emphasis added):

> Gaston Lake pipeline is a controversial project because it will remove a substantial amount of water from one river basin to a distant area. However, there is no longer any controversy concerning either the environmental effects on the Roanoke River, or the need for a new supply of water in Virginia Beach, in both

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[2] See pages 1-4 through 1-6 of the FEIS.

absolute terms and relative to the needs of northeastern North Carolina.

Our review of the data compiled since the Hudson decisions confirms that Virginia Beach's need for the water has increased, not decreased. Section 1.3 of the FEIS details the analysis of future water demand as a function of per capita use and population growth trends.[3] North Carolina has not supplied any information on rehearing that would cause us to modify the conclusions reached in the FEIS or the July 26 order.

Several studies conducted since the early 1980s predicted future water supply demands for the five-city area.[4] The FEIS evaluated the five-city area's need for water by analyzing the demand and supply projections of these previous studies using updated information. Although Virginia Beach and Chesapeake would be the primary users of the Lake Gaston water, the FEIS considers the entire five-city area's need for water.

The "United States government projections" to which North Carolina refers are the U.S. Bureau of Economic Analysis (BEA) 1986 projections.[5] The FEIS thoroughly reviewed these data (and others). One of [sic] factors used in determining the relative credibility of the various projections was the accuracy of the projection relative to actual values. This was verified by comparing projected population growth with actual values (the 1990 Census data). The five-city area's actual 1990 population exceeded the BEA's 1986 projections by 8

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[3] See pages 1-12 and 1-13, and 1-9 through 1-12, respectively.

[4] See Table 1-1 in the FEIS.

[5] See rehearing request at 5-6.

percent. Virginia Beach's actual 1990 population also exceeded the BEA 1986 projections.[6] And contrary to North Carolina's assertion, the FEIS did not use the highest population projections.[7]

North Carolina claims that the FEIS used average per capita use figures for the five-city area, with the result that Virginia Beach's demand was over-estimated. The FEIS evaluated regional water demand for the five-city area because of the existing interconnectedness of the system and the growing trend toward regional water sharing.[8] We also took this approach in an effort to be conservative (i.e., in North Carolina's favor), as this approach tends to overestimate system performance. North Carolina disregards the fact that Virginia Beach alone (without regional water sharing) has a projected water deficit of 49 mgd, in comparison to the regional deficit of 31 mgd used by the FEIS to determine need. The FEIS explains in detail the basis for the water supply deficit projection.[9]

North Carolina and the Sierra Club contend that the FEIS failed to take into account the most recent data in

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[6] In 1992, BEA increased its 2030 population projection from 1,092,000 to 1,209,000 reflecting its tendency to underestimate rapidly growing areas.

[7] The Virginia Employment Commission's estimate (the State of Virginia's official population projection) would be the highest estimate.

[8] North Carolina suggests that the Commission consider only Virginia Beach in evaluating water demand but consider regional water sharing in evaluating water supply. This approach is inconsistent.

[9] See pages 1-20 through 1-22 of the FEIS.

developing its water demand projection. In particular, North Carolina cites Exhibit 1 to the State of North Carolina's July 10, 1995 third motion for an evidentiary hearing as more recent evidence that water use is declining. These data are somewhat misleading, however, as they consider finished water only and are not corrected to account for water from municipal wells or the portion of the population not served by public water. When these values are corrected they do show a recent decline in per capita water use (albeit small). However, we fully expect some year-to-year variations in demand and supply.[10] The demand projections developed by the FEIS are based on trend analysis making use of long-term data sets. Basing long-term demand projections on a single year's data would be unreasonable. If the trend analyses in the FEIS were revised to include the "more recent" data cited by North Carolina it would not significantly change the future demand projections and would in no way alter the final conclusions on project need.[11]

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[10] Short term variability in local population growth and per capita water use can be due to variable economic and hydrologic conditions, and in this case is likely related to the strict conservation measures and growth moratorium in place in Virginia Beach.

[11] On August 30, 1995, after the expiration of the Federal Power Act's (FPA) 30-day statutory deadline for filing requests for rehearing, and well after the completion of the environmental review process and the issuance of the FEIS and the order amending the license, the Roanoke River Basin Association filed a letter asking us to recalculate the demand for water in the year 2030 based on allegedly more current and accurate data. The letter is untimely and will not be considered. See, e.g., Section 313(a) of the FPA, 16 U.S.C. § 8251(a), and In re City of Virginia Beach, 42 F.3d 881, 886 (4th Cir. 1994) ("[W]ith FERC's continuing assurance of expedited treatment and its promise to adhere to a tight schedule, we cannot conclude that the delays have been so egregious as to meet the demanding standards required of us to interfere with the agency process with a writ of mandamus."). In any event, it would not surprise us if concerted water conservation measures in response

Virginia Beach's Water Supply

The calculations and assumptions used to estimate the water supply deficit for the five-city area are explained in detail in Section 1.3.4 of the FEIS. This estimate takes into account considerations of public health and safety, and is consistent with the Corps of Engineers' water management criteria, the Virginia Department of Health's standards, and other management standards for water supply planning.

North Carolina questions the treatment of emergency wells in the FEIS analysis of water supply.[12] Virginia Beach drilled five emergency wells in response to the 1981 drought. The Virginia Department of Environmental Quality (VDEQ) restricts the use of these wells to municipally-declared water emergencies with mandatory water use restrictions enforceable by fines. As of 1993, the VDEQ did not consider these wells in their safe yield estimates for local governments. The Corps, as of 1994, considered these wells only as protection against extreme droughts.

These wells are located in, and owned by, the surrounding jurisdictions and leased by Virginia Beach (Suffolk - 2 wells, Isle of Wight County - 2 wells, Southhampton - 1 well). These jurisdictions have consistently opposed any expansion or repermitting of the wells. The leases for the wells

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to a serious shortage of water resulted in the very lowering of water consumption that the conservation measures were intended to produce. We would not regard the success of water conservation measures in the face of a shortage as indicative of a lessening of the need for more water.

[12] Rehearing request at 23-24.

expire between 1996 and 1998. The jurisdictions controlling these wells indicate that they do not intend to renew the leases.

Norfolk actively objects to the use of these wells for quality control reasons (high total dissolved solids and salinity). Norfolk predicts that use of these wells would threaten the integrity of the Norfolk water treatment system and Norfolk's ability to comply with drinking water standards. Our treatment of the emergency wells is consistent with municipal water supply planning practices and with the Corps' analyses.

North Carolina alleges[13] that the City of Chesapeake is successfully operating an aquifer storage and retrieval (ASR) system, and that the FEIS is flawed because it doesn't take that system into account in discussing water supply alternatives. Whether or not Chesapeake has a functioning ASR system, however. is irrelevant to a meaningful analysis of water supply alternatives. An ASR system is not a new source of water; it merely stores water from the existing supply for retrieval at a later date. The existence of an operating ASR system in the City of Chesapeake does not in any way alter our conclusions regarding project need. An ASR system can accommodate only short term (seasonal) supply and demand; it does not resolve the significant long-term regional water deficit described in the FEIS.

3. Other Contentions

The other contentions raised on rehearing with respect to the sufficiency of the record and of the environmental analysis have all been previously raised, considered and addressed. The parties have not raised on rehearing any new issue of that nature

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[13] Rehearing request at 28.

that convinces us of the existence of any gap, infirmity or inadequacy in the record or in the environmental analysis, or that in any other way persuades us to reconsider our prior order.

Contrary to North Carolina's contentions, the FEIS responded to all of North Carolina's comments on the Draft Environmental Impact Statement (DEIS). In particular, we categorically reject North Carolina's repeated, and thoroughly groundless, assertion that the Commission's staff did not conduct its own independent environmental analysis.[14] As discussed in Appendix E of the FEIS in response to the comments received on the DEIS, the FEIS includes an independent and comprehensive review of existing studies and analyses. Where appropriate, existing studies were updated with more recent data or independent analyses were conducted.

B. Request for an Evidentiary Hearing

In our July 26 order, we carefully considered North Carolina's request, restated in its July 10, 1995 motion, for an evidentiary hearing with cross-examination of witnesses under oath before an administrative law judge, and denied that motion for the reasons discussed in that order.[15] On rehearing, both North Carolina[16] and the Sierra Club[17] renew that request. They have not raised on rehearing, however, any new arguments that have not already been considered or that

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[14] Rehearing request at 24-27.

[15] 72 FERC ¶ 61,075 at p. 61,934.

[16] Rehearing request at 11-16.

[17] Rehearing request at 7-8.

persuade us to reconsider our prior decision. Accordingly, for the reasons stated in our July 26 order, we deny rehearing of the denial of the motions for an evidentiary hearing with cross-examination of witnesses under oath before an administrative law judge.

C. Compliance with the Clean Water Act

In our July 26 order, we carefully considered a motion filed by the State of North Carolina, and supported by the Roanoke River Basin Association, for a stay predicated on an alleged need for the issuance by the State of North Carolina of water quality certification pursuant to Section 401(a)(1) of the Clean Water Act (CWA).[18] We determined, for the reasons discussed in that order, that issuance or waiver of water quality certification by the State of North Carolina did not constitute a necessary predicate to the amendment of the license, because the amendment will not have a material adverse impact on the water quality in the discharge from the project.[19]

North Carolina[20] and the Sierra Club[21] both seek rehearing of our determination with respect to the Clean Water Act. They have not raised on rehearing, however, any arguments that were not previously considered or that persuade us to reconsider our prior determination. Accordingly, for the reasons stated in our July 26 order, we deny the request for

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18 33 U.S.C. § 1341(a)(1).

19 72 FERC ¶ 61,075 at pp. 61,393-94.

20 Rehearing request at 16-21.

21 Rehearing Request at 2-4.

rehearing of our determination that issuance or waiver of water quality certification by the State of North Carolina does not constitute a necessary predicate to amendment of the license.

We note, in this regard, that the Sierra Club contends that the Commission's analysis of water quality impacts is based solely on mean annual flows and fails to consider impacts during low flows, when flows will be reduced up to ten percent."[22] The FEIS, however, conducted a comprehensive analysis that is not limited to mean annual flows. Sections 3.3.3 and 4.1.3.2 of the FEIS, respectively, review existing water quality conditions and analyze project-related impacts in the Roanoke River below Roanoke Rapids Dam. In its analysis of the effects of the proposed project, the FEIS relied on two separate water quality modeling studies and ambient water quality data collected by the State of North Carolina between 1988 and 1993.[23] Based on that analysis, the FEIS (as incorporated by reference in the order) concluded that the project would not have a material adverse impact on the water quality of the Roanoke River.

There are additional relevant considerations which further undermine North Carolina's position on the CWA Section 401 issue. North Carolina's argument that the water supply project will involve a discharge originating within its borders, and thus requires a CWA Section 401 certification, if accepted, would reopen an issue that has already been put to rest

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[22] Id. at 4.

[23] In 1988, the State of North Carolina established four ambient wate r quality monitoring stations along the lower Roanoke River (Roanoke Rapids , Scotland Neck, Lewiston and Williamston) as part of the ongoing Albemarle-Pamlico study.

by the U.S. Army Corps of Engineers and the courts in the Hudson litigation.[24] As we explained in our prior order,[25]

> The Virginia Water Control Board issued water quality certification for the Lake Gaston water supply project on September 12, 1983; the Corps relied on that certification in issuing Virginia Beach a dredge and fill permit under section 404 of the CWA; and the dredge and fill permit was sustained on court review.

Assuming arguendo that the water supply project will result in a discharge into the navigable waters of North Carolina that originates in North Carolina, as North Carolina claims, the Corps would have been prohibited by Section 401 of the CWA from issuing its dredge-and-fill permit, without first obtaining a Section 401 certification from North Carolina's CWA certification agency. North Carolina was a party to the Corps' proceeding, yet never raised a Section 401 certification issue in that case. We conclude that North Carolina, having failed to assert its Section 401 certification claim before the appropriate agency at the appropriate time, has waived its right to demand a Section 401 certification prior to our amendment of Virginia Power's license. Cf. Keating v. FERC, 927 F.2d at 616, 620 (D.C. Cir. 1991) ("Under section 401(a)(3) of the Clean Water

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[24] In Hudson, the district court extensively reviewed the Corps of Engineers' findings concerning the project's effect on water quality in Nort h Carolina, and both the district court, see 665 F. Supp. at 438-440, and the Fourth Circuit specifically upheld the Corps' conclusion that "the effect on the quality of the water would be insignificant." Roanoke River Basin Ass'n v. Hudson, 940 F.2d 58, 64 (1991).

[25] 72 FERC ¶ 61,075 at p. 61,391.

Act, absent other valid objections, FERC was obliged to accept the certification underlying the Corps permit as satisfying the state certification requirement with respect to . . . [the] license application.")

D. Comprehensive Plan

Referring to the statutory standard of Section 10(a)(l) of the Federal Power Act (FPA), North Carolina contends that the Virginia Beach water supply project is not best adapted to a comprehensive plan for improving or developing the Roanoke River Basin, because the project "will have no beneficial effect on" the Basin.[26]

Section 10(a)(1)[27] provides in pertinent part that the Commission must ensure that the project is:

> best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of waterpower development, for the adequate protection, mitigation, and enhancement of fish and wildlife (including related spawning grounds and habitat), and for other beneficial public uses, including irrigation, flood control, water supply, and recreational and other purposes . . . .

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[26] Rehearing request at 30.

[27] 16 U.S.C. § 803(a)(1).

Section 10(a)(1) does not, as North Carolina suggests, limit the Commission to improving or developing a waterway or waterways simply for the benefit of the waterway on which a hydropower project is situated. This is clear from the section's reference to the development of a waterway for the use or benefit of foreign commerce. Indeed, hardly any diversion of water from a waterway for purposes of irrigation or water supply will benefit the waterway, since the water will not be returned to the waterway.[28] Rather, the section requires the Commission to ensure that a licensed project is used in a manner that benefits the optimal combination of public purposes.[29] That project water will be consumed by people living in a neighboring state and river basin does not nullify the beneficial nature of that use.

For the reasons discussed at length in our July 26 order and in the FEIS, we conclude that the record in this proceeding amply supports our determination that the use of the lands and waters of Project No. 2009 for Virginia Beach's water supply

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[28] The term "waterway" in not synonymous with "river basin" or "watershed."

[29] The comprehensive development standard of Section 10(a)(1) continues to apply throughout the license term. See S.D. Warren Co., 68 FERC ¶ 61,213 (1994) at p. 62,022. Both project uses and non-p roject uses are subject to that standard. See Puget Sound Power & Light Co., 54 FPC 157, 160 (1975). What constitutes such comprehensive development is not a static concept. See National Wildlife Federation v. FERC, 912 F.2d 1471 , 1475 (D.C. Cir. 1990) (quoting the Commission):

> "[C]omprehensive development is a concept that evolves over time, reflecting different eras' technical options, economic realities, and resource use priorities."

project meets FPA Section 10(a)(l)'s standard for comprehensive development of the waterway for beneficial public uses.

E. Term of Easements

North Carolina requests that we impose a limit on the term of all easements associated with Virginia Beach's water supply project commensurate with the term of the license, so as to cause all such easements to expire when the license expires.[30] The July 26 order, however, did not confer or establish any easements. The July 26 order authorized certain withdrawals of water from the project reservoir, Lake Gaston, and amended Virginia Power's license to implement that authorization. Those amendments and that authorization remain valid throughout the term of the license, as the license may be extended by annual licenses after the term of the original license expires. To the extent that Virginia Beach obtains easements to carry out their purposes in furtherance of the license and our authorization in the July 26 order, those easements are governed by their own terms and conditions, including whatever limitations of time (or lack thereof) they may contain. Of course, the entire project, including the use of project lands and waters for non-project purposes, is subject to the relicensing provisions of Section 15 of the FPA upon the expiration of Virginia Power's current license.

F. License Conditions

North Carolina requests, first of all, that it be included as an entity to be consulted with respect to Virginia Power's

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[30] Rehearing request at 31.

responsibilities under Articles 45, 46 and 48 of the license.[31] Article 45 requires consultation by Virginia Power in connection with the monitoring of the effectiveness of the walleye spawning facility. Article 46 requires consultation by Virginia Power in connection with its preparation of the Kerr Reservoir water release plan, to protect fishery resources. Article 48 requires Virginia Power to prepare a plan for monitoring water withdrawals from Lake Gaston for Virginia Beach. We agree that North Carolina should have an active role in reviewing and commenting on these monitoring plans, and accordingly, we will amend these three license articles to require consultation with North Carolina.

North Carolina recommends that Article 46 be amended to specify how storage in Kerr Reservoir is to be used to replace flows on a gallon-for-gallon basis when flows below Roanoke Rapids Dam are below striped bass target flows. North Carolina also questions how potential conflicts with releases for hydroelectric generation will be resolved. Article 46 was originally drafted and incorporated into the license for the purpose of addressing those very issues, and we believe that it is already clear and sufficiently specific in its mandate. Our amendment of that article today, requiring Virginia Power to consult with North Carolina in the development of the plan for managing and using the storage volumes, will ensure full consideration of North Carolina's concerns. Any disputes or problems that might arise can always be brought to the attention of our compliance staff, who can promptly investigate the matter in the context of the particular facts presented.

With respect to Article 48, North Carolina also requests that Virginia Power be required to provide periodic reports to

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[31] Rehearing request at 32-34.

North Carolina on the water withdrawals from Lake Gaston. We agree that such reporting is appropriate, and believe that the requirement for consultation that we are adding to Article 48 will enable North Carolina to develop with Virginia Power, during the consultation process, a workable and mutually acceptable reporting procedure that satisfies North Carolina's needs and concerns.

North Carolina also requests that we include as conditions to Virginia Power's license various obligations to which Virginia Beach agreed during the course of the settlement negotiations, including the financing by Virginia Beach of a program to control hydrilla in Lake Gaston, prohibitions on the sale of water by Virginia Beach outside of southeastern Virginia, requirements that Virginia Beach exhaust all local sources of water before using water from Lake Gaston, requirements that Virginia Beach adopt a drought index with a dispute resolution mechanism, requirements that Virginia Beach adopt a conservation program, and prohibitions against Virginia Beach's seeking particular regulations, legislation or standards or attempting to interfere with recreation in Lake Gaston.[32]

First of all, we note that both parties, including North Carolina, formally notified the Commission that the settlement negotiations did not result in a settlement and that both parties to the negotiations are free to adopt whatever positions they wish regardless of the commitments by which they would have been bound had the settlement gone into effect. North Carolina has freely availed itself of that opportunity by vigorously restating its opposition to the water supply project for Virginia Beach. North Carolina cannot, in that posture, insist on holding Virginia Beach to the financial (e.g., hydrilla control program

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[32] Rehearing request at 35-39.

financing) and other obligations to which Virginia Beach tentatively agreed in exchange for North Carolina's withdrawal of its opposition to the project. Either there is a settlement or there isn't; either it binds both parties or neither of them.

Secondly, we note that the Commission has jurisdiction only over Virginia Power, the licensee of the hydropower project, and not over Virginia Beach, the sponsor of the water supply project. The Commission can impose requirements on Virginia Power by means of including articles in the license issued to it, and the Commission can utilize its powers under the FPA to enforce Virginia Power's compliance with the terms and conditions of the license, but the Commission has no statutory authority (under the FPA or any other statute) to issue or deny a license to Virginia Beach for the water supply project, to impose requirements or prohibitions on Virginia Beach, or to force Virginia Beach to comply with any such requirements or prohibitions

Finally, we note that a number of the conditions proposed by North Carolina involve matters that are peculiarly local in nature. We believe that such matters are more appropriately regulated at the local level, by the local authorities who are most familiar with such matters, and that federal intrusion by our Commission is unwarranted. Accordingly, for all of the above reasons, we decline to impose such requirements on Virginia Beach as formal conditions of Virginia Power's license.

That having been said, there is one particularly important limitation that does apply. As we emphasized in our prior order[33] and reemphasize here, Virginia Power's application, and

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[33] 72 FERC ¶ 61,075 at p. 61,399.

our authorization in response to that application, are specifically predicated on the need for water in Virginia Beach and its immediately surrounding area. Accordingly (with the exception of emergency water deliveries to communities along the route of the water pipeline), our authorization is limited to that stated purpose and does not include authority to transfer or sell water from Lake Gaston outside of that designated region. See ordering paragraph (B) of our July 26 order.[34]

G. Request for a Stay

In our July 26 order, we carefully considered North Carolina's July 14, 1995 request for a stay of the effectiveness of the order pending rehearing and judicial review. We determined, for the reasons discussed in that order, that North Carolina had not made a showing adequate to convince us that justice required grant of a stay.

On rehearing, North Carolina repeats its request for a stay. The Sierra Club also requests a stay "to perfect its right to seek a judicial stay."[35] On September 11, Virginia Beach filed an answer to North Carolina's motion.

On rehearing, North Carolina and the Sierra Club have not advanced any new arguments on behalf of the grant of a stay that were not previously considered in our July 26 order, nor have they persuaded us to reconsider our previous denial of a stay. Accordingly, for the reasons stated in our July 26 order,

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[34] Id. at p. 61,400.

[35] Rehearing request at 9.

[36] we will deny the requests for a stay of the effectiveness of this order and of our July 26 order.

The Commission orders:

(A) Articles 45, 46 and 48 of the license are amended to read as follows:

> Article 45. At least 90 days prior to the start of operation of the City of Virginia Beach, Virginia's water supply project, the licensee shall file with the Commission, for approval, a plan for post-construction studies to monitor the effectiveness of the walleye spawning facility. The monitoring plan shall include a schedule for: (1) implementation of the plan; (2) consultation with the appropriate federal and state agencies concerning the results of the monitoring; and (3) filing the results, agency comments, and the licensee's response to agency comments with the Commission.
>
> The licensee shall ensure that the plan is prepared after consultation with the United States Fish and Wildlife Service, the Virginia Department of Game and Inland Fisheries, and the North Carolina Wildlife Resources Commission. The plan shall include documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies, comments are accommodated by the plan. The licensee shall ensure that agencies are allowed a minimum of 30 days to

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[36] 72 FERC ¶ 61,075 at pp. 61,094-95.

comment and to make recommendations before filing the plan with the Commission. If a recommendation is not adopted the filing shall include the reasons, based on project-specific information

If the results of the monitoring indicate that changes in the spawning facility are necessary to protect fish resources, the Commission may direct that the licensee ensure that the facility is modified,

Article 46. At least 90 days prior to the start of the water withdrawal, the licensee shall file with the Commission, for approval, a plan detailing how the 10,200 acre feet of storage volume in Kerr Reservoir is to be used to augment flows in the Roanoke River below the project dams during the striped bass spawning period and during low flow conditions. The plan shall include, but not be limited to, the following: (l) a detailed description of conditions under which the 10,200 acre-feet in Kerr Reservoir would be released for downstream flow mitigation; (2) procedures that will be implemented to coordinate the storage volume releases among the licensee, the U.S. Army Corps of Engineers (Corps), and the City of Virginia Beach (City); and (3) a schedule for filing annual reports on Kerr Reservoir storage volume releases to the Corps, the City, the Virginia and North Carolina resource agencies, and the Commission.

The licensee shall prepare the plan after consultation with the Corps, the City, and the North Carolina Wildlife Resources Commission and Department of Environmental Health and Natural Resources. The licensee shall include with the plan documentation of consultation, copies of comments on

the completed plan after it has been prepared and provided to the Corps, the City, and the North Carolina agencies, and specific descriptions of how the comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the Corps, the City and the North Carolina agencies to comment and to make recommendations before filing the plan with the Commission. The Commission reserves the right to require changes to the plan to ensure that the available storage in Kerr Reservoir is used to enhance flows during the striped bass spawning period and for low flow augmentation.

Article 48. In order for the Commission to monitor the City of Virginia Beach's compliance with the maximum withdrawal rate of 60 mgd the licensee shall monitor pipeline withdrawals. The licensee shall file, within 90 days prior to the initiation of water withdrawals, a plan for monitoring project withdrawals and maintaining records to ensure that withdrawals do not exceed the approved maximum rate of 60 mgd. The licensee shall ensure that the plan is prepared after consultation with the North Carolina Department of Environmental Health and Natural Resources, including consultation on appropriate reporting requirements.

(B) In all other respects, the requests for rehearing filed by the Sierra Club on August 24, 1995, and (jointly) by the State of North Carolina and the Roanoke River Basin Association on August 25, 1995, are denied.

(C) The requests for rehearing filed by Charnie A. Thompson, Jr., Lewis T. Crowder, Harold E. Carawan, and Maurice Emery, on August 7, 15, 21 and 25, respectively, are

rejected as unauthorized, because those persons are not parties to the proceeding and lack standing to file requests for rehearing.

(D) The requests for a stay of the effectiveness of this order and of the order issued on July 26. 1995, filed by the Sierra Club and (jointly) the State of North Carolina and the Roanoke River Basin Association as part of their respective requests for rehearing, are denied.

By the Commission.

(S E A L)

/s/ Linwood A. Watson, Jr.
Linwood A. Watson, Jr.,
Acting Secretary.

APPENDIX I

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: **Elizabeth Anne Moler, Chair;**
Vicky A. Bailey,
James J. Hoecker,
William L. Massey, and
Donald E. Santa, Jr.

Virginia Electric and Power Company) **Project No. 2009-010**

ORDER ON REMAND

(Issued November 7, 1996)

On July 26, 1995, the Commission issued its order approving non-project use of project lands and waters and amending license.[1] The order was based on, and incorporated by reference, the Final Environmental Impact Statement (FEIS), issued on July 7, 1995. On September 22, 1995, the Commission issued an order denying rehearing and denying a stay.[2]

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[1] 72 FERC ¶ 61, 075. On August 23, 1995, the Commission's Secretary issued a brief Errata to the order which, among other things, renumbered the five new license articles from 43 through 47 to 44 through 48.

[2] 72 FERC ¶ 61,283.

Thereafter, several parties filed petitions for review of the orders in the U.S. Court of Appeals for the District of Columbia Circuit.[3]

On September 11, 1996, the Court remanded the record of the proceeding to the Commission[4] with instructions to supplement the record within 60 days by making a determination (discussed below) with respect to Section 401(a)(1) of the Clean Water Act (CWA).[5] This order is issued pursuant to the Court's mandate.

On October 11, 1996, Virginia Beach filed a memorandum expressing its views on the CWA issues posed by the court's remand. On October 22, the Roanoke River Basin Association (RRBA) filed a response to Virginia Beach, expressing its opposing views on those issues.

On October 24, the U.S. Environmental Protection Agency (EPA) filed a letter expressing for the first time its views that the license amendment triggered an obligation to obtain CWA Section 401 certification from North Carolina.[6] On

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[3] North Carolina v. FERC, No. 95-1494.

[4] On September 23, 1996, the Court issued an order amending its September 11 order. The discussion below is based on the order as amended.

[5] 33 U.S.C. § 1341(a)(1). The Court has retained jurisdiction over the proceeding pending the remand. In Part B of this order, we clarify one matter. Inasmuch as the Court's September 11 order asked only for a Commission determination on a CWA issue, we will ask leave of the court to include Part B in this order on remand.

[6] Letter from Jonathan Z. Cannon, General Counsel, and Robert Perciasepe, Assistant Administrator for Water, EPA, to the Commissioner's Secretary, with copies to all parties to the proceeding.

October 28, Virginia Beach filed a letter responding to the EPA's contentions. On October 29, Senator Charles S. Robb, Senator John W. Warner, and Representative Owen W. Pickett, all of Virginia, also filed a letter responding to the EPA's contentions. On October 30, the Deputy Attorney General of Virginia also filed a letter responding to the EPA's contentions. On November 4, the RRBA filed a letter in response to the letter of the Deputy Attorney General of Virginia.

The Commission has carefully considered all of the views expressed in the above-identified filings. The discussion below expresses the Commission's understanding of the requirements of the CWA in the context of the facts and circumstances of this proceeding, in response to both the Court's question and the EPA and the parties' filings. For the reasons discussed below, the Commission concludes that the activity that the Commission approved in this proceeding (the construction and operation of facilities and withdrawal of water for the Virginia Beach water supply project) is not an activity that results in a discharge originating in the State of North Carolina within the meaning of Section 401(a)(1) of the CWA.

BACKGROUND

The Commission's orders on review authorized the licensee of the Gaston and Roanoke Rapids Project, Virginia Electric and Power Company (Virginia Power), to allow the City of Virginia Beach, Virginia, to withdraw approximately one percent of the flow of the Roanoke River from the project's reservoir, Lake Gaston, for the purpose of alleviating a water shortage in Virginia Beach. The orders also authorized Virginia Power to allow the construction of facilities to withdraw that water and transfer it to a water pipeline to be constructed by Virginia Beach.

Lake Gaston spans the Virginia-North Carolina border. The project's two dams are both located in North Carolina; thus, water exits the project in North Carolina, from where it flows to the Atlantic Ocean via the Roanoke River. Virginia Beach's water supply project, however, is located entirely within the State of Virginia. The water will be withdrawn from Pea Hill Cove, a portion of Lake Gaston that is located in Virginia, and will be transported to Virginia Beach in a water pipeline across Virginia. The new project facilities authorized by the orders to be constructed and operated within the project boundary[7] will be constructed entirely in Virginia.

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (RHA)[8] and Section 404 of the CWA,[9] the U.S. Army Corps of Engineers issued to Virginia Beach, on January 9, 1984, a dredge and fill permit to construct the water intake at Lake Gaston and the water pipeline to Virginia Beach. The Corps' dredge and fill permit was predicated on a water quality certification issued to Virginia Beach by the Virginia Water Control Board on September 12, 1983, pursuant to Section 401(a)(l) of the CWA.[10]

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7 See 72 FERC at p. 61,390.

8 33 U.S.C. § 403.

9 33 U.S.C. § 1344.

10 The Corps may issue a construction permit under Section 10 of the RHA, and a dredge and fill permit under Section 404 of the Clean Water Act, only if the activity to be permitted has received water quality certification (or waiver thereof) under Section 401(a)(1) of the Act.

In making its determination to issue the construction and dredge and fill permit, the Corps conducted an extensive environmental analysis of the potential impact of the water supply project, including potential adverse impacts on the environment of the Roanoke River downstream from Lake Gaston resulting from the water withdrawal. The sufficiency of that environmental analysis was approved on court review.[11]

In another related proceeding, on March 19, 1994, the Secretary of Commerce issued his Decision and Findings in the Consistency Appeal of the Virginia Electric and Power Company from an Objection by the North Carolina Department of Environment, Health and Natural. Resources. The Secretary determined, among other things, that the Virginia Beach water supply project is consistent with the objectives and purposes of the Coastal Zone Management Act (CZMA).[12] In order to make that determination, the Secretary first determined that the water supply project met the requirements of the Clean Air Act and the CWA. With respect to the CWA, the Secretary based his determination on the CWA Section 401(a)(1) certification issued by the Virginia State Water Control Board in September of 1983, i.e., the same state certification relied on by both the Corps of Engineers and this Commission in exercising their own respective federal regulatory functions with regard to the water supply

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[11] See North Carolina v. Hudson, 665 F. Supp. 428 (E.D.N.C. 1987); North Carolina v. Hudson, 731 F. Supp. 1261 (E.D.N.C. 1990); Roanoke River Basin Association v. Hudson, 940 F.2d 58 (4th Cir. 1991); and North Carolina v. Virginia Beach, 951 F.2d 596 (4th Cir. 1991).

[12] Pursuant to Section 307 of the Coastal Zone Management Act, 16 U.S.C. § 1456(c)(3)(A), a finding of inconsistency would have precluded the Commission from allowing Project No. 2009 lands and water to be used for the water supply project.

project.[13] The Secretary of Commerce's CZMA consistency determination was affirmed by the U.S. District Court.[14]

DISCUSSION

A. The Clean Water Act

The Court, in its order remanding the record, quoted the following passage from the Commission's July 26, 1995 order:[15]

> However, even assuming, arguendo, that the proposed amendment to the Project No. 2009 license to accommodate the construction and operation of Virginia Beach's water supply project is subject to the provisions of section 401(a)(1) [of the CWA], the amendment does not trigger the requirement for certification under that section. Section 4.38(f)(7)(iii) of the Commission's regulations provides in pertinent part:
>
> > [A]ny application to amend an existing license . . . requires a new request for water quality certification . . . if the amendment would have a material adverse

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[13] Determination at pp. 37 and 117 (n.256).

[14] North Carolina v. Department of Commerce, Civ. No. 94-1569 (TFH), 42 Env't. Rep. Cas. (BNA) 1254 (D.D.C. Sept. 28, 1995). North Carolina did not appeal the District Court's affirmance, and that ruling is now final.

[15] 72 FERC at pp. 61,393-94.

> impact on the water quality in the discharge from the project . . . .
>
> The impact of an approximately one percent reduction in flow releases into the Roanoke River from the project dam is exhaustively analyzed in the FEIS, as summarized above and discussed below. We conclude, based on that analysis, that the amendment to the license will not have a material adverse impact on the water quality in the discharge from the project. Accordingly, the license can be amended without water quality certification (or waiver thereof) from North Carolina.

The Court then directed the Commission, on remand of the record, to answer the following question:[16]

> This language leaves unresolved the question of whether § 401(a) (l) applies to require certification from North Carolina, insofar as the Commission "assum[ed], arguendo" that the answer was "yes" and proceeded to rest its action on Section 4.38(f)(7)(iii) of its regulations. Following initial briefing and oral argument, the Court believes that in the interest of judicial economy the Commission should answer this question before we exercise judicial review over the other issues of the case.

The Court of Appeals has thus directed the Commission to determine in the first instance whether the construction and operation of Virginia Beach's water supply project and withdrawal in Virginia of approximately one percent of the flow of the Roanoke River constitutes a "discharge" that "originates" in North Carolina within the meaning of Section 401(a)(1) of the

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[16] Remand at 2.

CWA. For the reasons discussed below, we conclude that it does not.

We believe it is important to examine Section 401(a)(1) within the full context and purpose of the CWA. As discussed more fully below, subsection (1) of Section 401(a) requires any applicant for a federal license or permit to obtain -- from the state in which it proposes to conduct an activity to be licensed or permitted -- a certification from that state that the discharge emanating from that activity will be in compliance with the requirements of the CWA. Those requirements are designed to protect the water from pollution.

Subsection (2) of Section 401(a) provides a remedy for neighboring states that may be affected by the proposed discharge; such affected states may file a timely objection with the Administrator of the U.S. Environmental Protection Agency (EPA), requesting a public hearing on the potential impact.

Finally, subsection (3) of Section 401 (a) provides that the certification, once received from the relevant state in conjunction with the initial federal agency's license or permit "with respect to the construction of any facility shall fulfill," absent a change in circumstances, the certification requirements "in connection with any other Federal license or permit required for the operation of such facility."[17] As quoted below, Section 101(g) of the CWA makes clear that Congress did not intend the CWA to be used to allocate water between and among different states. Against the background of this overall statutory scheme, we turn to analysis of the statutory language.

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[17] 33 U.S.C. § 1341(a)(3).

Section 401(a)(1) of the CWA provides, in pertinent part, as follows (emphasis added):

> (1) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title. . . .

The Roanoke River at the site of the project is a navigable water of the United States.[18] Section 502(16) of the CWA defines "discharge" as follows:

> The term "discharge" when used without qualification includes a discharge of a pollutant, and a discharge of, pollutants.

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[18] In Virginia Electric and Power Co., 10 F P.C. 1, 6 (finding no. 4) (1951), the Commission determined that the Roanoke River is a navigable river at the site of the project as that term is used in the Federal Power Act. Section 502 of the CWA (33 U.S.C. § 1362(7)) defines "navigable waters" for purposes of the CWA as "waters of the United States, including the territorial seas," a definition that is broader than the comparable term in the Federal Power Act.

Section 502(12) of the CWA defines "discharge of a pollutant" as "any addition of any pollutant to navigable waters from any point source . . . ."[19]

We believe that Congress intended the word "discharge" to include only substances that are added to the water in some manner, and did not intend to include the withdrawal of the water itself within the scope of that term. See Save Our Community v. Environmental Protection Agency, 971 F.2d 1155, 1165 (5th Cir. 1992) (removal of water from wetlands does not constitute a discharge within meaning of Section 404 of the CWA). We believe that the plain and commonly understood meaning of the phrase "discharge into the navigable waters" (emphasis added) is unduly strained if it is read to include the removal of something that was already in the water, and is particularly strained if it is read to include the removal of the water itself.

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[19] 33 U.S.C. § 1362 (12). Section 502(6), 33 U.S.C. § 1362(6), defines "pollutant" in pertinent part as:

> dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. [Emphasis added.]

The EPA's regulations contain comparable definitions with respect to its implementation of Section 402 of the CWA. See 40 C.F.R. Ch. 1 (July 1, 1996 Edition) § 122.2, in which "discharge" is defined as "discharge of a pollutant," and the latter is defined as "any addition of any 'pollutant' to . . . [variously defined waters];" and § 401.11(g) and (h), all of which track the above-quoted definitions in the CWA.

The contentions the EPA letter[20] do not provide a sound basis for the Commission to reach a different conclusion. At the outset, the EPA asserts[21] that its view of the scope of CWA § 401 (a) is entitled to Chevron deference,[22] and then characterizes the "activity" which requires a FERC license amendment as an alleged change in "the terms of operation of the dam in North Carolina." The EPA's views are not, however, entitled to Chevron deference because the letter does not "rank [ ] as an agency adjudication or rulemaking."[23] Indeed, in the context of this case,

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[20] The EPA's letter is untimely in the extreme. As discussed below, North Carolina's remedy under the CWA, as a neighboring affected state, is to petition the Administrator of the EPA pursuant to Section 401(a)(2) of the CWA) for a public hearing on the impact of Virginia Beach's water supply project on North Carolina. North Carolina did exactly that, and on a very timely basis -- in 1983 -- but EPA did not grant the relief requested. Nor did the EPA seek to intervene or participate in the proceeding before the Commission until thirteen years later, after the Commission had acted and the proceeding was pending on court review with the record temporarily remanded to us. In short, instead of timely and actively developing the record in the Commission's proceeding, or developing a record of its own under Section 401 (a) (2), the EPA speaks up for the first time as a belated, post-proceeding commenter.

[21] Letter as pp. 3-5.

[22] See Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837 (1984).

[23] See Roosevelt v. E.I. Du Pont de Nemours & Co., 958 F.2d 416, 427 n.19 (D.C. Cir. 1992) (declining to extend Chevron deference to SEC staff no-action or amicus curiae brief); see also Bowen v. Georgetown University Hospital, 488 U.S. 204, 212 (1988) (declining to extend Chevron deference to "an agency's counsel's interpretation of a statute where the agency itself has articulated no position on the question"); City of Kansas City, Mo. v HUD, 923 F.2d 1888, 192 (D.C. Cir. 1991) (same). See also PUD No. 1, 114 S.Ct.

deference to EPA does not even come into play. We deal here with questions of fact and the application of the licensing provisions of the Federal Power Act that we are charged with administering. Thus, it is the Commission's determination of which activity requires a license amendment, as well as the scope of that amendment, that it entitled to Chevron deference.[24] As discussed below, we have found that the "activities" which necessitate a Commission license amendment are: (1) the construction of water supply facilities within the Virginia Power project boundary; and (2) the withdrawal of water from Pea Hill Cove in Lake Gaston. In these circumstances, we do not find persuasive (or entitled to deference) the suggestion in the EPA's letter that the "activity" subject to the Federal Power Act's (FPA) license amendment requirements is a change in "the terms of operation of the dam in North Carolina."[25]

In view of the EPA's reliance on PUD No. 1 of Jefferson County, supra, however, a fuller analysis of that decision is warranted. The Supreme Court did not deal with the question of what activity gives rise to a discharge so as to trigger the certification requirement of Section 401(a)(1); all parties agreed that the section applied. Rather, the Court held that, once the

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at 1109 (applying Chevron deference only to EPA's regulations implementing § 401); Arkansas v. Louisiana, 112 S.Ct. 1046, 1060 (1992) (applying Chevron deference only to EPA adjudication).

[24] See Oconto Falls. Wisconsin v. Federal Energy Regulatory Commission, 41 F.3d 671, 674 (D.C. Cir. 1994) (FERC determination that "orphaned" hydropower project proceedings were not "original" license proceedings under Federal Power Act (FPA) Section 7(a), but were instead relicensing proceedings governed by FPA Section 15, entitled to Chevron deference).

[25] Letter at p. 5.

certification requirement of Section 401(a)(1) is triggered by a discharge for which a federal permit or license is required, then the certification conditions are not limited to addressing merely the physical quality of the water, but can also require implementation of state water quality standards under the more expansive language of Section 401(d), whose scope is broad enough to encompass water flows.

We reject, moreover, the EPA's assertion [26] that the principles of PUD No. 1 are controlling here; in truth, the facts of this case are dispositively different from the facts in PUD No. 1. In PUD No. 1, there was no hydropower project in existence at the time the state asserted § 401 authority over the operation of the entire project. It was uncontested than the activity that would need a federal license in PUD No. 1 -- operation of the hydropower project -- would result in at least two discharges, originating in the certifying state (one associated with construction, and the other at the tailrace after electricity had been generated). The existence of these discharges was critical to the Supreme Court's determination that the state could regulate the flows resulting from the licensed activities.[27] Here, in contrast, the critical questions in dispute are entirely different -- namely, whether there is a discharge, and, if so, what activity gave rise to it, and where the activity takes place.

Thus, unlike PUD No. 1, the "activity" involved in the license amendment process here is not the operation of the hydropower project. To the contrary, the "activity" of operating the project has already been licensed. Indeed, the only activity

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[26] Letter at p. 4.

[27] 114 S.Ct. at 1908-09 ("[s]ection 401(a)(1) identifies the categories of activities subject to certification -- namely those with discharges").

that necessitates a license amendment here, construction of the water supply facilities and the withdrawal of water, occurs entirely in Virginia, and that activity has already been certified by Virginia. In short, it was the presence of two discharges in the certifying state in PUD No. 1, and the absence of any discharges originating in North Carolina in this case, that distinguishes the State of Washington's authority to certify the reduction in flows in PUD No. 1 from North Carolina's lack of authority to do so here.

However, even if the word "discharge" is ultimately determined to be broad enough to include the removal of water from the water, we determine, as an alternative basis for decision, that the activity involved in enabling such removal occurs entirely in (i.e., for CWA purposes "originates" in) Virginia, and not in North Carolina. The clear language of Section 401(a)(1), as quoted above, provides that the requirement for CWA certification is triggered by an "activity," and that the certification is to be obtained from the state in which that "activity" occurs, i.e., the state in which the resulting "discharge" will originate". The activity we authorized and approved in the amendment to the license occurs in Virginia, and that is the state in which the discharge originates; none of that activity occurs in North Carolina. In this respect, it is important to distinguish the amendment herein from proceedings leading to the issuance of a license.

In a proceeding in which the Commission issues an original license to construct and operate a new hydroelectric project, the "activity" is the construction of the project facilities and operation of the project. The "discharge" from the construction of the facilities includes the dirt, gravel, waste, etc., that falls or is placed into the river during the course of construction, and the "discharge" from the operation of the project

is the water that leaves the project as it flows over or through a dam, or through penstocks, powerhouse turbines and tailraces, and reenters the river or enters some other waterway.

In a proceeding for a new license (relicense) of the project after the original license has expired, if no new facilities are proposed to be constructed, then the "activity" requiring certification is the continued operation of the project. The place of discharge is the place at which the project waters leave the project impoundment or bypass facilities and reenter the river or other waterway.

In both original licensing and relicensing, the construction and/or the operation of the project results in the deposit of something -- dirt, water or other potential substances -- from the project to a waterway. That is the "discharge" from the project, and it "originates" at the place where the dirt falls into the water and where the water flows from the project into the river. Section 401(a)(1) requires certification from the state in which the activity occurs.

In the case before us, however, Virginia Power already has a valid license to operate the project, and did not seek or receive any renewed authority to do so. The new "activity" for which Virginia Power, on behalf of Virginia Beach, sought and received authority from the Commission is the construction and operation of water withdrawal facilities within the Project No. 2009 boundary. That activity -- including the removal of water -- will originate entirely in Virginia, and the only "discharges" associated with that activity -- the deposition in the water of dirt

and other construction debris -- will also originate entirely in Virginia.[28]

The EPA misconstrues the nature of the Commission's authorization in this proceeding. The Commission did not authorize any physical change to the facilities located in North Carolina, nor did the Commission make any changes in the license's minimum flow requirements from those facilities. And although Virginia Power will be able to generate less electricity at Lake Gaston after Virginia Beach's water supply project is implemented, Virginia Power's existing license does not impose a requirement to generate a particular amount of electricity. Both of the project's dams will continue to operate within the parameters of the license. No amendment to the license was required with respect to maintaining minimum flows in the river or a minimum level in the reservoir, nor with respect to minimum releases from either of the dams, nor any other aspect of the operation of the dams. In short, the amendment of the license did not entail any activity that occurs in North Carolina.

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[28] As noted, the Commission amended Virginia Power's license for the Gaston and Roanoke Rapids Project in order to accommodate Virginia Beach's non-project use of project lands and waters. These facilities will have no role in the generation of electricity or any other licensed project purpose. In analyzing such requests, the Commission examines under NEPA the proposed activity's potential environmental impacts, and reasonable alternatives to the proposed activity. This informs the Commission's determination of whether the non-project use can be granted as consistent with the public interest standard of Section 10(a)(1) of the Federal Power Act, which governs (and governs only) use of the licensed project's lands and waters. These analyses were conducted with respect to the potential environmental impacts of the one-percent diminution of water leaving Lake Gaston, and the proposed construction of the water withdrawal facilities.

The amount of electric power generated in a given year is roughly proportional to the amount of water that is passed downstream through the project's turbines,[29] which is in itself a function of rainfall, flood control decisions, flows to protect fishery resources, and minimum releases to protect water quality, etc. Virginia Power's license authorizes a wide range of river flows[30] and prescribes neither a minimum nor maximum amount of electricity to be generated. A review of the Commission's records indicates that the electric power generated by the project over the past ten years has ranged very widely, from 333,980 megawatt hours (MWh) (in 1986) to 963,805 MWh (in 1989) -- a variation from year to year of almost 300 percent.[31] The

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[29] The correlation between river flow and electric generation is not entirely linear because both head and unit efficiency vary with the volume of the flow, and there is also a potential for spillage over one of the dams depending on the rate of the water releases from Kerr Reservoir.

[30] See pp. 2-9 to 2-16 of Exhibit A of the RRBA's filing for a detailed description of how the project is operated.

[31] Virginia Electric and Power Company
Gaston and Roanoke Rapids Project No. 2009
Historical Net Generation Exclusive of Station Use

Year	Roanoke Rapids Development	Gaston Development	Total
	MWh	MWh	MWh
1986	164,347	169,633	333,980
1987	457,656	506,149	963,805
1988	197,260	184,228	381,488
1989	462,317	463,630	925,947
1990	449,237	447,281	896,518
1991	314,281	326,901	641,182
1992	310,865	301,230	612,095

Virginia Beach water supply project, on the other hand, will reduce the flow of the river downstream of the project by only one percent (approximately) of what it would otherwise have been, with an approximate average annual loss of 7,930 MWh of electric generation (about 1.1 percent). In other words, the natural variation in the flow of the river from year to year vastly exceeds the variation induced by the water supply project. Those wide variations are encompassed within the authorization of Virginia Power's existing license.

Because the statutory scheme of the Clean Water Act limits the certification requirement of Section 401(a)(1) to the state in which the federally authorized activity discharge will originate -- here, Virginia, which issued certification in 1983 -- no Section 401(a)(1) certification is required from North Carolina, a potentially affected other state.[32] Such a state's remedy is under Section 401(a)(2) of the Clean Water Act,[33] which provides, in

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1993	380,643	451,691	832,334
1994	328,520	356,024	684,544
1995	320,071	326,437	646,508

Source: FERC Form No. 1.

[32] See, e.g., EPA's publication entitled Wetlands and 401 Certification, Opportunities and Guidelines for States and Eligible Indian Tribes (EPA 843-B-89-100, April 1989), at p. 8: "States may grant or deny 'certification' for a federally permitted or licensed activity that may result in a discharge to the waters of the United States, if it is in the State where the discharge will originate"; see also p. 22, which discusses the procedural remedies available to other affected states.

[33] See National Wildlife Federation v. FERC, 912 F.2d 1471, 1483-84 (D.C. Cir. 1990) (Section 401 certification not required from upstream state

pertinent part, that whenever the Administrator of the EPA determines that a discharge "may affect . . . the quality of the waters of any other State," that "other State" may object to the federal permit and require a public hearing.[34] The permitting

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that will incur soil erosion caused by dam in downstream state); Lake Erie Alliance v. U.S. Amy Corps of Engineers, 526 F. Supp. 1063, 1074-75 (W.D. Pa. 1981), aff'd, 707 F.2d 1392 (3d Cir. 1983), cert. denied, 464 U.S. 915 (1983) (discharge from Ohio steel mill on border of Pennsylvania originates in Ohio; CWA Section 401 certification from Pennsylvania not required despite effect on Pennsylvania's waters).

[34] Emphasis added. Section 401(a)(2), 33 U.S.C. § 1341(a)(2), provides as follows:

> Upon receipt of such application and certification the licensing or permitting agency shall immediately notify the Administrator of such application and certification. Whenever such a discharge may affect, as determined by the Administrator, the quality of the waters of any other State, the Administrator within thirty days of the date of notice of application for such Federal license or permit shall so notify such other State, the licensing or permitting agency, and the applicant. If, within sixty days after receipt of such notification, such other State determines that such discharge will affect the quality of its waters so as to violate any water quality requirement in such State, and within such sixty-day period notifies the Administrator and the licensing or permitting agency in writing of its objection to the issuance of such license or permit and requests a public hearing on such objection, the licensing or permitting agency shall hold such a hearing. The Administrator shall at such hearing submit his evaluation and recommendations with respect to any such objection to the licensing or permitting agency. Such agency, based upon the

agency then must either "condition such license or permit in such manner as may be necessary to insure compliance with applicable water quality requirements" or deny the permit.

In 1983, in the context of the Corps' review for a dredge and fill permit, North Carolina followed exactly this procedure and asked the EPA to require a Section 401(a)(2) hearing for the Virginia Beach water supply project. The EPA did not grant North Carolina's request.[35] In sum, North Carolina followed the

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> recommendations of such State, the Administrator, and upon any additional evidence, if any, presented to the agency at the hearing, shall condition such license or permit in such manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions cannot insure such compliance such agency shall not issue such license or permit.

[35] See Comments of the State of North Carolina on Water Quality Effects of Proposed Lake Gaston Water Supply Diversion Project Under Permit Consideration by the Army Corps of Engineers, attached to letter to Mr. Charles R. Jeter, Regional Administrator, U.S. Environmental Protection Agency, Atlanta, Georgia, from Hon. James B. Hunt, Jr., Governor, State of North Carolina (December 29, 1983); letter from Mr. Jeter to Mr. James A. Summers, North Carolina Department of Natural Resources and Community Development, Raleigh, North Carolina (April 6, 1984).

> In this case, for all the reasons detailed in the FEIS and our orders, the impact on the Roanoke river downstream of Lake Gaston is insubstantial, reducing average flows in the river by about one percent. But even if the Virginia Beach water supply project had proposed to reduce flows much more substantially (which it did not), it would not change our view of whether a discharge resulted and, if so, where it would originate for purposes of Section 401. However, that very different proposal would still need to pass muster as reasoned decision-making under the balancing provisions of Section

proper procedure under Section 401(a)(2). Its request was denied. EPA cannot now come in to this proceeding, 13 years later, and seek to undo its prior determination. In our view, North Carolina's status as an affected advisory state has not changed simply because the water supply project is being reviewed by a different agency. The proposal the Corps of Engineers approved is the very same Virginia Beach water supply project that we authorized.

Pursuant to the terms of CWA Section 401(a)(3), water quality certification issued by the relevant state in conjunction with a federal agency's license or permit "with respect to the construction of any facility shall fulfill," absent a change in circumstances, [36] the certification requirements" in connection with any other Federal license or permit required for the operation of such facility."[37] As noted, in 1983 the State of Virginia issued

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10(a)(1) of the Federal Power Act and would need to be supported by substantial evidence. Moreover, North Carolina, as the affected state, could also pursue its remedies under Section 401(a)(2) based on that very different set of facts.

[36] See Keating v. Federal Energy Regulatory Commission, 927 F.2d 616 (D.C. Cir. 1991). In the instant proceeding, there has been no notice or allegation of a change of circumstance under Section 401(a)(3) subsequent to Virginia's issuance of its 1983 water quality certification in connection with the Corps of Engineers dredge and fill permit.

[37] 33 U.S.C. § 1341(a)(3) states:

> (3) The certification obtained pursuant to paragraph (1) of this subsection with respect to the construction of any facility shall fulfill the requirements of this subsection with respect to certification in connection with any other Federal license or permit required for the operation of such facility unless, after notice to the certifying State, agency, or Administrator, as the case may be, which shall be given by the Federal agency to whom application is made for such operating license or permit, the State, or if appropriate, the interstate

Section 401(a)(1) water quality certification for the dredge and fill permit subsequently issued by the Corps for Virginia Beach's water supply project.

The Commission firmly rejects the EPA's broad assertion that any amendment to a license triggers a requirement for CWA Section 401(a)(1) certification even absent any nexus at all between the amendment and water quality. The Commission frequently has occasion to amend hydropower project licenses to reflect land-based changes in projects' recreation plans (e.g., management of park lands or picnic areas, etc.), roads, or electric transmission lines that may be miles away from the river and have no relationship whatever to water or water quality. Amendments that have no impact on, or nexus to, water quality at the site of the project cannot be construed to confer unfettered CWA conditioning and veto power on the state in which the park, road or transmission line might be located, and least of all on the state in which the water is located even though it may not be the state in which the park, road, or transmission line is located.

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agency or the Administrator, notifies such agency within sixty days after receipt of such notice that there is no longer reasonable assurance that there will be compliance with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title because of changes since the construction license or permit certification was issued in (A) the construction or operation of the facility, (B) the characteristics of the water into which such discharge is made, (C) the water quality criteria applicable to such waters or (D) applicable effluent limitations or other requirements. This paragraph shall be inapplicable in any case where the applicant for such operating license or permit has failed to provide the certifying State or, if appropriate, the interstate agency or the Administrator, with notice of any proposed changes in the construction or operation of the facility with respect to which a construction license or permit has been granted, which changes may result in violation of section 1311, 1312, 1313, 1316, or 1317 of this title.

The EPA asserts[38] that "even if there were no change to the licensed activity," Section 401 certification by North Carolina is still required because Section 401 applied to licensing of any activity, including an ongoing activity that may result in a discharge. We conclude that it is the activity for which the applicant seeks a federal license (or license amendment), not some previously licensed "ongoing activity," that must be the activity requiring a certification from the state in which the discharge will originate.

Further, in seeking to withdraw water from Lake Gaston, Virginia is allocating the use of water within its borders. We believe it clear that Congress did not intend the CWA to be used as a means of allocating water between and among different states or other entities or claimants. Section 101(g) of the CWA provides:[39]

> (g) Authority of States over water
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> It is the policy of Congress that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired by this chapter. It is the further policy of Congress that nothing in this chapter shall be construed to supersede or abrogate rights to quantities of water

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38 Letter at p. 5.

39 33 U.S.C. § 1251(g). See also PUD No. 1 of Jefferson County et al. v. Washington Department of Ecology et al., supra, 114 S. Ct. at 1913, quoting from the legislative history of Section 101(g): "It is the purpose of this amendment to insure that State allocation systems are not subverted, and that effects on individual rights, if any, are prompted by legitimate and necessary water quality considerations."

which have been established by any State. Federal agencies shall co-operate with State and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources.

North Carolina's argument that a diminished flow, without more, triggers the requirements of CWA Section 401(a)(1) is, at bottom, an argument that North Carolina can control any alteration in the amount of water it receives from an upstream state, any time a federal permit happens to be needed in conjunction with such alteration.[40] We do not believe that Congress intended the CWA to be used by a downstream state as a device to frustrate the ability of an upstream state to allocate in-state water to meet public consumptive needs within that upstream state.[41]

Accordingly, for all of the above reasons, we determine that the activities we authorized in our orders of July 26 and September 22, 1995, in the above-captioned proceeding do not

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[40] We discern no difference between a state's right to, e.g., increase the withdrawal of water from a river within its boundaries through the use of existing facilities located upstream of a FERC-licensed reservoir, and the state's right to withdraw more water from the same river by obtaining appropriate federal agency authorizations to build new water withdrawal facilities at the FERC-licensed reservoir.

[41] Virginia Beach (memorandum at p. 16, n. 6) and the Deputy Attorney General of Virginia (letter at p. 1) cite an enactment of the Virginia General Assembly (1992 Va. Acts, Ch. 812) as constituting an allocation of 60 mgd of water from the Roanoke River at Lake Gaston for itself and its neighboring communities. The EPA, in its letter, did not address Section 101(g) of the CWA nor the use of Section 401 to allocate (or block the allocation of) water between and among states.

involve a "discharge" in the State of North Carolina within the meaning of Section 401(a)(1) of the CWA, because the discharge originates in the State of Virginia and not in the State of North Carolina.

B. Virginia Beach's Rights to Mitigation Flows

Subject to a grant of leave by the Court, we will take this occasion to clarify the record with respect to another matter that was raised during oral argument before the Court.

The RRBA has asserted on several occasions that Virginia Beach's legal right to request the Corps of Engineers to release water it has stored in Kerr Reservoir is subordinate to the rights of Virginia Power and its affiliate, Carolina Power & Light Co., with respect that water [sic]. Pursuant to a contract dated January 13, 1984, Virginia Beach purchased the right to use an estimated 10,200 acre-feet of storage space in Kerr Reservoir between elevations 268 and 300 above mean sea level. The RRBA cites a passage in a September 24, 1986 "memorandum for record" from Max Grimes, "Chief H&H Branch" of the Engineering Division of the Wilmington, North Carolina office of the Corps, as support for its contention that Virginia Beach's contractual right to the Kerr Reservoir water is subordinate to water rights held by Virginia Power and Carolina Power & Light.[42] The memorandum refers to "ongoing litigation" involving the Corps, Virginia Beach, and the latter's water supply contract, and was apparently drafted prior to the resolution of that litigation.

We find the RRBA's concerns about a potential risk that Virginia Power (or its affiliate) would seek to enforce the alleged contractual priority to the stored water to be completely

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[42] See FEIS, Appendix at p. E-250.

unfounded. By accepting the authorization and amendment to its license, Virginia Power has obligated itself to refrain from taking any action that would be inconsistent with the conditions of the license or that would undermine the predicates upon which the license was issued. See Article 47 of the license,[43] which requires Virginia Power to file a plan for Commission approval showing how the storage volume in Kerr Reservoir will be used to augment flows in the Roanoke River below the project dams during the striped bass spawning period and during low flow conditions.[44] The Corps of Engineers' dredge and fill permit imposed a comparable requirement on Virginia Power.[45]

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[43] 72 FERC at p. 61,400-01. Article 47 was originally numbered 46 and was renumbered as 47 in the August 23, 1995 Errata.

[44] The EPA (letter at p. 5) notes that "the Commission amended the license to add a provision to ensure the mitigation of downstream impacts [on] fishery resources due to the proposed withdrawal." As discussed above, however, that amendment does not constitute an "activity" in North Carolina from which a "discharge" "originates" because the amendment did not make any change in the minimum flows or any other aspect of the operation of the two project dams in North Carolina.

[45] See North Carolina v. Hudson, 731 F. Supp. 1261, 1265-66 (E.D.N.C. 1990). In 1987, a year after the Grimes memorandum, the Corps found "it appropriate to amend the City's permit to require as a condition that they must allow the Wilmington District, Corps of Engineers to utilize [for the protection of striped bass spawning] the storage which the City has purchased in Kerr Reservoir" (emphasis in the original). See also Roanoke River Basin Ass'n v. v. Hudson, 940 F.2d 58, 64 (4th Cir. 1991): "The Corps' decision to make the mitigation condition mandatory means that the modified permit protects the appellants' interests (and the striped bass) more completely."

By the Commission

/s/ Lois D. Cashell,
Lois D. Cashell,
Secretary.

APPENDIX J

Clean Water Act, 33 U.S.C. § 1341. Certification

(a) Compliance with applicable requirements; application; procedures; license suspension. (1) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 301, 302, 303, 306, and 307 of this Act [33 USCS §§ 1311, 1312, 1313, 1316, 1317]. In the case of any such activity for which there is not an applicable effluent limitation or other limitation under sections 301(b) and 302 [33 USCS §§ 1311(b), 1312], and there is not an applicable standard under sections 306 and 307 [33 USCS §§ 1316, 1317], the State shall so certify, except that any such certification shall not be deemed to satisfy section 511 (c) of this Act [33 USCS § 1371(c)]. Such State or interstate agency shall establish procedures for public notice in the case of all applications for certification by it and, to the extent it deems appropriate, procedures for public hearings in connection with specific applications. In any case where a State or interstate agency has no authority to give such a certification, such certification shall be from the Administrator. If the State, interstate agency, or Administrator, as the case may be, fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application. No

license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence. No license or permit shall be granted if certification has been denied by the State, interstate agency, or the Administrator, as the case may be.

(2) Upon receipt of such application and certification the licensing or permitting agency shall immediately notify the Administrator of such application and certification. Whenever such a discharge may affect, as determined by the Administrator, the quality of the waters of any other State, the Administrator within thirty days of the date of notice of application for such Federal license or permit shall so notify such other State, the licensing or permitting agency, and the applicant. If, within sixty days after receipt of such notification, such other State determines that such discharge will affect the quality of its waters so as to violate any water quality requirement in such State, and within such sixty-day period notifies the Administrator and the licensing or permitting agency in writing of its objection to the issuance of such license or permit and requests a public hearing on such objection, the licensing or permitting agency shall hold such a hearing. The Administrator shall at such hearing submit his evaluation and recommendations with respect to any such objection to the licensing or permitting agency. Such agency, based upon the recommendations of such State, the Administrator, and upon any additional evidence, if any, presented to the agency at the hearing, shall condition such license or permit in such manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions cannot insure such compliance such agency shall not issue such license or permit.

(3) The certification obtained pursuant to paragraph (1) of this subsection with respect to the construction of any

facility shall fulfill the requirements of this subsection with respect to certification in connection with any other Federal license or permit required for the operation of such facility unless, after notice to the certifying State, agency, or Administrator, as the case may be, which shall be given by the Federal agency to whom application is made for such operating license or permit, the State, or if appropriate, the interstate agency or the Administrator, notifies such agency within sixty days after receipt of such notice that there is no longer reasonable assurance that there will be compliance with the applicable provisions of sections 301, 302, 303, 306, and 307 of this Act [33 USCS §§ 1311, 1312, 1313, 1316, 1317] because of changes since the construction license or permit certification was issued in (A) the construction or operation of the facility, (B) the characteristics of the waters into which such discharge is made, (C) the water quality criteria applicable to such waters or (D) applicable effluent limitations or other requirements. This paragraph shall be inapplicable in any case where the applicant for such operating license or permit has failed to provide the certifying State, or, if appropriate, the interstate agency or the Administrator, with notice of any proposed changes in the construction or operation of the facility with respect to which a construction , license or permit has been granted, which changes may result in violation of section 301, 302, 303, 306, or 307 of this Act [33 USCS §§ 1311, 1312, 1313, 1316, 1317].

(4) Prior to the initial operation of any federally licensed or permitted facility or activity which may result in any discharge into the navigable waters and with respect to which a certification has been obtained pursuant to paragraph (1) of this subsection, which facility or activity is not subject to a Federal operating license or permit, the licensee or permittee shall provide an opportunity for such certifying State, or, if appropriate, the interstate agency or the Administrator to review the manner in

which the facility or activity shall be operated or conducted for the purposes of assuring that applicable effluent limitations or other limitations or other applicable water quality requirements will not be violated. Upon notification by the certifying State, or if appropriate, the interstate agency or the Administrator that the operation of any such federally licensed or permitted facility or activity will violate applicable effluent limitations or other limitations or other water quality requirements such Federal agency may, after public hearing, suspend such license or permit. If such license or permit is suspended, it shall remain suspended until notification is received from the certifying State, agency, or Administrator, as the case may be, that there is reasonable assurance that such facility or activity will not violate the applicable provisions of section 301, 30.2, 303, 306, or 307 of this Act [33 USCS §§ 1311, 1312, 1313, 1316, 1317].

(5) Any Federal license or permit with respect to which a certification has been obtained under paragraph (1) of this subsection may be suspended or revoked by the Federal agency issuing such license or permit upon the entering of a judgment under this Act that such facility or activity has been operated in violation of the applicable provisions of section 301, 302, 303, 306, or 307 of this Act [33 USCS §§ 1311, 1312, 1313, 1316, 1317].

(6) Except with respect to a permit issued under section 402 of this Act [33 USCS § 1342], in any case where actual construction of a facility has been lawfully commenced prior to April 3, 1970, no certification shall be required under this subsection for a license or permit issued after April 3, 1970, to operate such facility, except that any such license or permit issued without certification shall terminate April 3, 1973, unless prior to such termination date the person having such license or permit submits to the Federal agency which issued such license or permit

a certification and otherwise meets the requirements of this section.

(b) Compliance with other provisions of law setting applicable water quality requirements. Nothing in this section shall be construed to limit the authority of any department or agency pursuant to any other provision -of law to require compliance with any applicable water quality requirements. The Administrator shall, upon the request of any Federal department or agency, or State or interstate agency, or applicant, provide, for the purpose of this section, any relevant information on applicable effluent limitations, or other limitations, standards, regulations, or requirements, or water quality criteria, and shall, when requested by any such department or agency or State or interstate agency, or applicant, comment on any methods to comply with such limitations, standards, regulations, requirements, or criteria.

(c) Authority of Secretary of the Army to permit use of spoil disposal areas by Federal licensees or permittees. In order to implement the provisions of this section, the Secretary of the Army, acting through the Chief of Engineers, is authorized, if he deems it to be in the public interest, to permit the use of spoil disposal areas under his jurisdiction by Federal licensee or permittees, and to make an appropriate charge for such use. Moneys received from such licensees or permittees shall be deposited in the Treasury as miscellaneous receipts.

(d) Limitations and monitoring requirements of certification. Any certification provided under this section shall set forth any effluent limitations a d other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 301 or 302 of this Act [33 USCS § 1311 or 1312], standard of

performance under section 306 of this Act [33 USCS § 1316], or prohibition, effluent standard, or pretreatment standard under section 307 of this Act [33 USCS § 1317], and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section.

(June 30, 1948, ch. 758, Title IV, § 401, as added Oct. 18, 1972, P. L. 92-500, § 2, 86 Stat 877; Dec. 27, 1977, P. L. 95-217, §§ 61(b), 64, 91 Stat. 1598, 1599.)

APPENDIX K

Section 303, U.S.C. § 1313.

Water quality standards and implementation plans

(a) Existing water quality standards.

(1) In order to carry out the purpose of this chapter, any water quality standard applicable to interstate waters which was adopted by any State and submitted to, and approved by, or is a waiting approval by, the Administrator pursuant to this Act as in effect immediately prior to October 18, 1972, shall remain in effect unless the Administrator determined that such standard is not consistent with the applicable requirements of this Act as in effect immediately prior to October 18, 1972. If the Administrator makes such a determination he shall, within three months after October 18, 1972, notify the State and specify the changes needed to meet such requirements. If such changes are not adopted by the State within ninety days after the date of such notification, the Administrator shall promulgate such changes in accordance with subsection (b) of this section.

(2) Any State which, before October 18, 1972, has adopted, pursuant to its own law, water quality standards applicable to intrastate waters shall submit such standards to the Administrator within thirty days after October 18, 1972. Each such standard shall remain in effect, in the same manner and to the same extent as any other water quality standard established under this chapter unless the Administrator determines that such standard is inconsistent with the applicable requirements of this Act as in effect immediately prior to October 18, 1972. If the Administrator makes such a determination he shall not later than the one hundred and twentieth day after the date of submission

of such standards, notify the State and specify the changes needed to meet such requirements. If such changes are not adopted by the State within ninety days after such notification, the Administrator shall promulgate such changes in accordance with subsection (b) of this section.

(3)(A) Any State which prior October 18, 1972, has not adopted pursuant to its own laws water quality standards applicable to intrastate waters shall, not later than one hundred and eighty days after October 18, 1972, adopt and submit such standards to the Administrator.

(B) If the Administrator determines that any such standards are consistent with the applicable requirements of this Act as in effect immediately prior to October 18, 1972, he shall approve such standards.

(C) If the Administrator determines that any such standards are not consistent with the applicable requirements of this Act as in effect immediately prior to October 18, 1972, he shall, not later than the ninetieth day after the date of submission of such standards, notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the Administrator shall promulgate such standards pursuant to subsection (b) of this section.

(b) Proposed regulations

(1) The Administrator shall promptly prepare and publish proposed regulations setting forth water quality standards for a State in accordance with the applicable requirements of this Act as in effect immediately prior to October 18, 1972, if —

(A) the State fails to submit water quality standards within the times prescribed in subsection (a) of this section.

(B) a water quality standard submitted by such State under subsection (a) of this section determined by the Administrator not to be consistent with the applicable requirements of subsection (a) of this section.

(2) The Administrator shall promulgate any water quality standard published in a proposed regulation not later than one hundred and ninety days after the date he publishes any such proposed standard, unless prior to such promulgation, such State has adopted a water quality standard which the Administrator determines to be in accordance with subsection (a) of this section.

(c) Review; revised standards; publication

(1) The Governor of a State or the State water pollution control agency of such State shall from time to time (but at least once each three year period beginning with October 18, 1972) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards. Results of such review shall be made available to the Administrator.

(2)(A) Whenever the State revises or adopts a new standard, such revised or new standard shall be submitted to the Administrator. Such revised or new water quality standard shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses. Such standards shall be such as to protect the public

health or welfare, enhance the quality of water and serve the purposes of this chapter. Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation.

(B) Whenever a State reviews water quality standards pursuant to paragraph (1) of this subsection, or revises or adopts new standards pursuant to this paragraph, such State shall adopt criteria for all toxic pollutants listed pursuant to section 1317(a)(1) of this title for which criteria have been published under section 1314(a) of this title, the discharge or presence of which in the affected waters could reasonably be expected to interfere with those designated uses adopted by the State, as necessary to support such designated uses. Such criteria shall be specific numerical criteria for such toxic pollutants. Where such numerical criteria are not available, whenever a State reviews water quality standards pursuant to paragraph (1), or revises or adopts new standards pursuant to this paragraph, such State shall adopt criteria based on biological monitoring or assessment methods consistent with information published pursuant to section 1314(a)(8) of this title. Nothing in this section shall be construed to limit or delay the use of effluent limitations or other permit conditions based on or involving biological monitoring or assessment methods or previously adopted numerical criteria.

(3) If the Administrator, within sixty days after the date of submission of the revised or new standard, determines that such standard meets the requirements of this chapter, such standard shall thereafter be the water quality standard for the applicable waters of that State. If the Administrator determines that any such revised or new standard is not consistent with the

applicable requirements of this chapter, he shall not later than the ninetieth day after the date of submission of such standard notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the Administrator shall promulgate such standard pursuant to paragraph (4) of this subsection.

(4) The Administrator shall promptly prepare and publish proposed regulations setting forth a revised or new water quality standard for the navigable waters involved —

(A) if a revised or new water quality standard submitted by such State under paragraph (3) of this subsection for such waters is determined by the Administrator not to be consistent with the applicable requirements of this chapter, or

(B) in any case where the Administrator determines that a revised or new standard is necessary to meet the requirements of this chapter.

The Administrator shall promulgate any revised or new standard under this paragraph not later than ninety days after he publishes such proposed standards, unless prior to such promulgation, such State has adopted a revised or new water quality standard which the Administrator determines to be in accordance with this chapter.

(d) Identification of areas with insufficient controls; maximum daily load; certain effluent limitations revision

(1)(A) Each State shall identify those waters within its boundaries for which the effluent limitations required by section

1311(b)(1)(A) and section 1311(b)(1)(B) of this title are not stringent enough to implement any water quality standard applicable to such waters. The State shall establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters.

(B) Each State shall identify those waters or parts thereof within its boundaries for which controls on thermal discharges under section 1311 of this title are not stringent enough to assure protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife.

(C) Each State shall establish for the water identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those pollutants which the Administrator identifies under section 1314(a)(2) of this title as suitable for such calculation. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.

(D) Each State shall estimate for the waters identified in paragraph (1)(B) of this subsection the total maximum daily thermal load required to assure protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife. Such estimates shall take into account the normal water temperatures, flow rates, seasonal variations, existing sources of heat input, and the dissipative capacity of the identified waters or parts thereof. Such estimates shall include a calculation of the maximum heat input that can be made into each such part and shall include a margin of safety which takes into account any lack of knowledge concerning the development

of thermal water quality criteria for such protection and propagation in the identified waters or parts thereof.

(2) Each State shall submit to the Administrator from time to time, with the first such submission not later than one hundred and eighty days after the date of publication of the first identification of pollutants under section 1314(a)(2)(D) of this title, for his approval the waters identified and the loads established under paragraphs (1)(A), (1)(B), (1)(C), and (1)(D) of this subsection. The Administrator shall either approve or disapprove such identification and load not later than thirty days after the date of submission. If the Administratorapproves such identification and load, such State shall incorporate them into its current plan under subsection (e) of this section. If the Administrator disapproves such identification and load, he shall not later than thirty days after the date of such disapproval identify such waters in such State and establish such loads for such waters as he determines necessary to implement the water quality standards applicable to such waters and upon such identification and establishment the State shall incorporate them into its current plan under subsection (e) of this section.

(3) For the specific purpose of developing information, each State shall identify all waters within its boundaries which it has not identified under paragraph (1)(A) and (1)(B) of this subsection and estimate for such waters the total maximum daily load with seasonal variations and margins of safety, for those pollutants which the Administrator identifies under section 1314(a)(2) of this title as suitable for such calculation and for thermal discharges, at a level that would assure protection and propagation of a balanced indigenous population of fish, shellfish, and wildlife.

(4) Limitations on revision of certain effluent limitations

(A) Standard not attained

For waters identified under paragraph (1)(A) where the applicable water quality standard has not yet been attained, any effluent limitation based on a total maximum daily load or other waste load allocation established under this section may be revised only if (i) the cumulative effect of all such revised effluent limitations based on such total maximum daily load or waste load allocation will assure the attainment of such water quality standard, or (ii) the designated use which is not being attained is removed in accordance with regulations established under this section.

(B) Standard attained

For waters identified under paragraph (1)(A) where the quality of such waters equals or exceeds levels necessary to protect the designated use for such waters or otherwise required by applicable water quality standards, any effluent limitation based on a total maximum daily load or other waste load allocation established under this section, or any water quality standard established under this section, or any other permitting standard may be revised only if such revision is subject to and consistent with the antidegradation policy established under this section.

(e) Continuing planning process

(1) Each State shall have a continuing planning process approved under paragraph (2) of this subsection which is consistent with this chapter.

(2) Each State shall submit not later than 120 days after October 18, 1972, to the Administrator for his approval a proposed continuing planning process which is consistent with this chapter. Not later than thirty days after the date of submission of such a process the Administrator shall either approve or disapprove such process. The Administrator shall from time to time review each State's approved planning process for the purpose of insuring that such planning process is at all times consistent with this chapter. The Administrator shall not approve any State permit program under subchapter IV of this chapter for any State which does not have an approved continuing planning process under this section.

(3) The Administrator shall approve any continuing planning process submitted to him under this section which will result in plans for all navigable waters within such State, which include, but are not limited to, the following:

(A) effluent limitations and schedules of compliance at least as stringent as those required by section 1311(b)(1), section 1311(b)(2), section 1316, and section 1317 of this title, and at least as stringent as any requirements contained in any applicable water quality standard in effect under authority of this section;

(B) the incorporation of all elements of any applicable area-wide waste management plans under

section 1288 of this title, and applicable basin plans under section 1289 of this title;

(C) total maximum daily load for pollutants in accordance with subsection (d) of this section;

(D) procedures for revision;

(E) adequate authority for intergovernmental cooperation;

(F) adequate implementation, including schedules of compliance, for revised or new water quality standards, under subsection (c) of this section;

(G) controls over the disposition of all residual waste from any water treatment processing;

(H) an inventory and ranking, in order of priority, of needs for construction of waste treatment works required to meet the applicable requirements of sections 1311 and 1312 of this title.

(f) Earlier compliance

Nothing in this section shall be construed to affect any effluent limitation, or schedule of compliance required by any State to be implemented prior to the dates set forth in sections 1311(b)(1) and 1311(b)(2) of this title nor to preclude any State from requiring compliance with any effluent limitation or schedule of compliance at dates earlier than such dates.

(g) Heat standards

Water quality standards relating to heat shall be consistent with the requirements of section 1326 of this title.

(h) Thermal water quality standards

For the purposes of this chapter the term "water quality standards" includes thermal water quality standards.

APPENDIX L

Section 502, 33 U.S.C. § 1362.

Except as otherwise specifically provided, when used in this chapter:

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(12) The term "discharge of a pollutant" and the term "discharge of pollutants" each means (A) any addition of any pollutant to navigable waters from any point source, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.

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(16) The term "discharge" when used without qualification includes a discharge of a pollutant, and a discharge of pollutants.

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(19) The term "pollution" means the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.

APPENDIX M

16 F.P.C. 1281, 1284 (incorporated by reference in VEPCO's 1960 license at 23 F.P.C. 537, 544)

Public Utility District No. 1 of Cowlitz County, Wash.

Project No. 2213

Order issuing license (major)

November 29, 1956

FORM L-4

Terms and Conditions of License for
Unconstructed Major Project Affecting
Navigable Waters of the United States

December 15, 1953

Article 3. Said project works shall be constructed in substantial conformity with the approved exhibits referred to in article 2 herein or as changed in accordance with the provisions of said article. Except when emergency shall require for the protection of navigation, life, health, or property, no substantial alteration or addition not in conformity with the approved plans shall be made to any dam or other project works under the license without the prior approval of the Commission; and any emergency alteration or addition so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in the project works or divergence from such approved exhibits may be made if such changes will not result in decrease in efficiency, in material increase in cost, or

in impairment of the general scheme of development; but any of such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct. The licensee shall comply with such rules and regulations of general or special applicability as the Commission may from time to time prescribe for the protection of life, health, or property.

Article 17. The licensee, its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights of occupancy and use; and none of such properties necessary or useful to the project and to the development, transmission, and distribution of power therefrom will be voluntarily sold, transferred, abandoned, or otherwise disposed of without the approval of the Commission: Provided, that a mortgage or trust deed or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article. In the event the project is taken over by the United States upon the termination of the license, as provided in section 14 of the act, or is transferred to a new licensee under the provisions of section 15 of the act, the licensee, its successors and assigns will be responsible for and will make good any defect of title to or of right of user in any of such project property which is necessary or appropriate or valuable and serviceable in the maintenance and operation of the project, and will pay and discharge, or will assume responsibility for payment and discharge, of all liens or incumbrances upon the project or project property created by the licensee or created or incurred after the issuance of the license: Provided, that the provisions of this article are not intended to prevent the abandonment or the

retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear, or to require the licensee, for the purpose of transferring the project to the United States or to a new licensee, to acquire any different title to or right of user in any of such project property than was necessary to acquire for its own purposes as licensee.